



# Study on the Portability Regulation

Final report

VISIONARY  
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KANTAR PUBLIC

Written by Visionary Analytics with support from Kantar Public and external experts (Dr Kristian Billeskov Bøving, Dr Jan Krämer, Michele Ledger, Dr Gabor Molnar, Prof Dr Jan Hendrik Schuman, Dr Alexandre De Streel).

This study was carried out for the European Commission by Visionary Analytics with support from Kantar Public and external experts (Dr Kristian Billeskov Bøving, Dr Jan Krämer, Michele Ledger, Dr Gabor Molnar, Prof Dr Jan Hendrik Schuman, Dr Alexandre De Stree).

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# **Study on the Portability Regulation**

Final report

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## ABBREVIATIONS

ABR	Adaptive Bit Rate
ADR	Alternative Dispute Resolution
AVMSD	Audiovisual Media Services Directive
BYOI	Bring your own identity
CDN	Content Delivery Network
CMO	Collective Management Organisation
CPC	Consumer Protection Cooperation
DCD	Digital Content Contracts Directive
DDoS	Distribute Denial of Service
DG	Directorate-General
DPA	Data protection authority
DSM	Digital Single Market
EAO	European Audiovisual Observatory
EBSI	European Blockchain Services Infrastructure
EC	European Commission
EDPB	European Data Protection Board
EEA	European Economic Area
eIDAS	Electronic identification and trust services
EP	European Parliament
EU	European Union
FAQ	Frequently asked questions
FPS	Frames per second
GDPR	General Data Protection Regulation
IP	Internet Protocol
IPTV	Internet Protocol Television
MS	Member State
OS	Operating System
OTT	Over-the-top
P2P	Peer-to-peer
SME	Small and mid-size enterprises
SVOD	Subscription-based VOD
TVP	TV Polonia
UK	United Kingdom
USA	United States of America
VOD	Video on demand
VPN	Virtual private network

## ABSTRACT

The study aimed to (1) gather evidence regarding the practical application of the portability rules by online content service providers, (2) assess consumers' experience with the cross-border portability of online content services and (3) assess the impacts of the Portability Regulation on service providers (in particular SMEs) and rightholders (content producers and distributors). The study relied on the following data collection methods:

- Desk research
- Survey of online content service providers (62 responses)
- Survey of national and European consumer organisations and relevant national authorities (40 responses)
- Mystery shopping exercise covering 39 service providers
- Interviews with 38 online content service providers, 11 consumer organisations and national authorities, 14 rightholder organisations
- 8 case studies providing illustrative good practice examples addressing issues faced during implementation of the Portability Regulation

Firstly, the results of the study show that the overwhelming majority of service providers apply the Portability Regulation. However, certain limitations on cross-border portability have been identified in a limited number of cases: the unavailability of content on particular devices, offering cross-border portability only after the consumer enables the cross-border portability feature, limiting the time of a temporary presence abroad.

Secondly, the majority of the stakeholders that participated in the study (service providers, rightholders and consumer organisations) see the Portability Regulation as a positive development.

Thirdly, the impact of the Portability Regulation depends on the sector in which service providers or rightholders operate. Both surveyed and interviewed service providers and rightholders operating only in the music, e-book and game sectors in most cases did not face any significant costs related to the introduction of the Portability Regulation. These sectors had been applying full cross-border portability prior to the Regulation came into force and consequently did not have to change anything in their operations. The surveyed service providers in the audiovisual and sports sectors had to make some changes to comply with the Regulation, however, with some exceptions, these costs were reported to be minor. Rightholders in these sectors also reported minor impacts of the Regulation, as some of them led to slightly revised contracts with service providers.

Finally, the recent legal, technological and market developments do not pose significant challenges to the Portability Regulation's implementation. On the contrary, recent legal developments (in particular the Digital Content Contracts Directive, the Consumer Protection Cooperation Regulation and the Directive on Collective Redress) will most probably strengthen enforcement of the Portability Regulation. In addition, technological developments provide new solutions for ensuring a better quality of services for consumers (mainly Content Delivery Networks) and could make the verification of the Member State of residence easier. Furthermore, market developments show that the demand for cross-border portability should continue to grow in the future, as the general demand for online content services increases. However, temporary travel restrictions due to COVID-19 have reduced the demand for cross-border portability at present.



## SYNTHESE

L'étude visait à (1) rassembler des indications concernant l'application pratique des règles de portabilité par les fournisseurs de services de contenu en ligne, (2) évaluer l'expérience des consommateurs en matière de portabilité transfrontalière des services de contenu en ligne et (3) évaluer les impacts du règlement sur la portabilité sur les fournisseurs de services (en particulier les PME) et les détenteurs de droits (producteurs et distributeurs de contenu). L'étude s'est appuyée sur les méthodes de collecte de données suivantes :

- Recherche documentaire
- Enquête auprès des fournisseurs de services de contenu en ligne (62 réponses)
- Enquête auprès des organisations de consommateurs nationales et européennes et des autorités nationales compétentes (40 réponses)
- Exercice de client mystère couvrant 39 prestataires de services
- Entretiens avec 38 fournisseurs de services de contenu en ligne, 11 organisations de consommateurs et autorités nationales, 14 organisations de détenteurs de droits.
- 8 études de cas fournissant des exemples de bonnes pratiques illustrant les problèmes rencontrés lors de la mise en œuvre du règlement sur la portabilité

Tout d'abord, les résultats de l'étude montrent que la très grande majorité des fournisseurs de services appliquent le règlement sur la portabilité. Toutefois, certaines limitations à la portabilité transfrontalière ont été identifiées dans un nombre limité de cas : indisponibilité du contenu sur certains appareils, offre de la portabilité transfrontalière uniquement après que le consommateur ait activé la fonction de portabilité transfrontalière, limitation de la durée de présence temporaire à l'étranger.

Deuxièmement, la majorité des parties prenantes qui ont participé à l'étude (fournisseurs de services, détenteurs de droits et organisations de consommateurs) considèrent le règlement sur la portabilité comme une évolution positive.

Troisièmement, l'impact du règlement sur la portabilité dépend du secteur dans lequel les prestataires de services ou les détenteurs de droits opèrent. Les fournisseurs de services et les détenteurs de droits sondés et interrogés qui opèrent uniquement dans les secteurs de la musique, des livres électroniques et des jeux vidéos n'ont, dans la plupart des cas, pas eu à subir des coûts importants liés à l'introduction du règlement sur la portabilité. Ces secteurs appliquaient déjà la portabilité transfrontalière complète avant l'entrée en vigueur du règlement et n'ont donc rien eu à changer dans leur fonctionnement. Les prestataires de services interrogés dans les secteurs de l'audiovisuel et du sport ont dû procéder à quelques changements pour se conformer au règlement, mais, à quelques exceptions près, ces coûts ont été jugés mineurs. Les détenteurs de droits dans ces secteurs ont également signalé un impact mineur du règlement, certains d'entre eux ayant légèrement révisé les contrats avec les prestataires de services.

Enfin, les récents développements juridiques, technologiques et commerciaux ne posent pas de problèmes importants pour la mise en œuvre du règlement sur la portabilité. Au contraire, les développements juridiques récents (en particulier la directive sur les contrats de fourniture de contenus numériques, le règlement sur la coopération en matière de protection des consommateurs et la directive sur les recours collectifs) renforceront très probablement l'application du règlement sur la portabilité. En outre, les développements technologiques offrent de nouvelles solutions pour assurer une meilleure qualité de services aux consommateurs (principalement les réseaux de diffusion de contenu) et pourraient faciliter la vérification de l'État membre de résidence. En outre, l'évolution du marché montre que la demande de portabilité transfrontalière devrait s'intensifier à l'avenir, car la demande générale de services de contenu en ligne va augmenter. Cependant, les restrictions temporaires de voyage dues à la pandémie de COVID-19 réduisent pour l'instant la demande de portabilité transfrontalière.

## ABSTRACT

Ziel der Studie war es, (1) Erkenntnisse über die praktische Anwendung der Portabilitätsregeln durch Anbieter von Online-Inhaltendiensten zu gewinnen, (2) die Erfahrungen der Verbraucher mit der grenzüberschreitenden Portabilität von Online-Inhaltendiensten zu bewerten und (3) die Auswirkungen der Portabilitätsverordnung auf Diensteanbieter (insbesondere KMU) und Rechteinhaber (Produzenten und Verreiber von Inhalten) zu beurteilen. Die Studie stützte sich auf die folgenden Methoden der Datenerfassung:

- Recherche am Schreibtisch
- Umfrage unter Anbietern von Online-Inhaltendiensten (62 Antworten)
- Umfrage bei nationalen und europäischen Verbraucherorganisationen und relevanten nationalen Behörden (40 Antworten)
- Mystery Shopping bei 39 Dienstleistern
- Interviews mit 38 Anbietern von Online-Inhaltendiensten, 11 Verbraucherorganisationen und nationalen Behörden, 14 Organisationen von Rechteinhabern
- 8 Fallstudien mit anschaulichen Good-Practice-Beispielen, die sich mit Problemen bei der Implementierung der Portabilitätsverordnung befassen

Erstens zeigen die Ergebnisse der Studie, dass die überwältigende Mehrheit der Diensteanbieter die Portabilitätsverordnung anwendet. In einer begrenzten Anzahl von Fällen wurden jedoch bestimmte Einschränkungen der grenzüberschreitenden Portabilität festgestellt: Nichtverfügbarkeit von Inhalten auf bestimmten Geräten, Angebot der grenzüberschreitenden Portabilität nur nach Aktivierung der grenzüberschreitenden Portabilitätsfunktion durch den Verbraucher, Begrenzung der Zeit des vorübergehenden Aufenthalts im Ausland. Zweitens sieht die Mehrheit der Stakeholder, die an der Studie teilgenommen haben (Diensteanbieter, Rechteinhaber und Verbraucherorganisationen), die Portabilitätsverordnung als positive Entwicklung. Drittens hängen die Auswirkungen der Portabilitätsverordnung von der Branche ab, in der Diensteanbieter oder Rechteinhaber tätig sind. Sowohl die befragten als auch die interviewten Diensteanbieter und Rechteinhaber, die nur in den Bereichen Musik, E-Books und Spiele tätig sind, hatten in den meisten Fällen keine nennenswerten Kosten im Zusammenhang mit der Einführung der Portabilitätsverordnung zu tragen. Diese Sektoren haben die volle grenzüberschreitende Portabilität bereits vor Inkrafttreten der Verordnung angewendet und mussten daher nichts an ihrem Betrieb ändern. Die befragten Dienstleister im audiovisuellen Bereich und im Sportbereich mussten einige Änderungen vornehmen, um der Verordnung zu entsprechen, jedoch wurden diese Kosten mit einigen Ausnahmen als geringfügig angegeben. Rechteinhaber in diesen Sektoren haben ebenfalls von geringfügigen Auswirkungen der Verordnung berichtet, da einige von ihnen ihre Verträge mit Dienstleistern leicht überarbeitet haben. Schließlich stellen die jüngsten rechtlichen, technologischen und Marktentwicklungen keine wesentlichen Herausforderungen für die Umsetzung der Portabilitätsverordnung dar. Im Gegenteil, die jüngsten rechtlichen Entwicklungen (insbesondere die Digitale-Inhalte-Richtlinie, die Verordnung zur Zusammenarbeit im Verbraucherschutz und die Richtlinie über kollektive Rechtsdurchsetzung) werden höchstwahrscheinlich die Durchsetzung der Portabilitätsverordnung stärken. Darüber hinaus bieten technologische Entwicklungen neue Lösungen zur Sicherstellung einer besseren Qualität der Dienste für die Verbraucher (hauptsächlich CDNs) und könnten die Überprüfung des Wohnsitzmitgliedstaates erleichtern. Darüber hinaus zeigen die Marktentwicklungen, dass die Nachfrage nach der grenzüberschreitenden Portabilität in Zukunft zunehmen dürfte, da die allgemeine Nachfrage nach Online-Inhaltendiensten steigen wird. Die vorübergehenden Reisebeschränkungen aufgrund von COVID-19 reduzieren jedoch derzeit die Nachfrage nach grenzüberschreitender Portabilität.

## EXECUTIVE SUMMARY

The overall objective of this study is to support the Commission with an assessment of the application of the Portability Regulation and to provide input in view of the preparation of the Commission's report required under Article 10 of the Regulation. Specifically, the study aimed to (1) gather evidence regarding the practical application of the portability rules by online content service providers, (2) assess consumers' experience with cross-border portability of online content services and (3) assess the impacts of the Portability Regulation on service providers (in particular SMEs) and rightholders (content producers and distributors).

The study relied on the following data collection methods:

- **Desk research** was mainly used to review the existing knowledge base (incl. academic literature) on the implementation of the Portability Regulation.
- Two online surveys:
  - **Survey of online content service providers.** The aim of this survey was to collect information on how service providers apply the Portability Regulation, what challenges they face and what the costs and impact of the Regulation are. This survey was open for responses from 15 December 2020 to 26 March 2021. We received 62 responses representing respondents from different sectors, types, sizes and geographical coverage.
  - **Survey of national and European consumer organisations and relevant national authorities.** The aim of this survey was to collect information on consumers' experience with cross-border portability of online content services. This survey was open for responses from 21 December 2020 to 28 February 2021. We received 40 responses (30 of them from consumer organisations and 10 from data protection authorities).
- **Mystery shopping exercise** aimed to collect data for assessing how the Portability Regulation is implemented in practice from a consumer's point of view. During the mystery shopping exercise, the project team tested 39 online content services<sup>1</sup>.
- **Interviews** with 38 online content service providers, 11 consumer organisations and 14 rightholder organisations aimed to collect information about the impact of the Portability Regulation and to further explore the surveys' findings.
- **8 case studies of good practice examples** aimed to provide illustrative good practice examples for addressing issues faced during the implementation of the Portability Regulation.

### Impact of recent legal, technical, and market developments on the application of the Portability Regulation

We have identified the following recent **legal developments** that may have impacted the application of the Portability Regulation or might influence it in the future:

- **The Consumer Protection Cooperation (CPC) Regulation** has the potential to impact enforcement of portability rules. The impact is likely to be higher for largely used services offered by service providers who operate on a pan-European level.
- **The Geo-Blocking Regulation** has no impact at the moment, as the prohibition to apply different general conditions of access to goods and services does not apply to the online content services covered by the Portability Regulation.
- **The revised Audiovisual Media Services Directive (AVMSD)** will only have a very indirect impact, if any (e.g. impact on technical features relating to accessibility).
- **The Digital Content Contracts Directive (DCD)** has no impact at the moment, as its rules are not yet in application. The directive may have a potential impact on remedies/enforcement.
- **The Directive on online transmission of broadcasts** will facilitate the clearance of copyright for certain online transmissions of radio and television programmes. It will therefore make it easier for broadcasters to make their programmes available online in other territories. It may have an impact on the decisions of broadcasters providing free online content services to opt in to apply the Portability Regulation.
- **The Directive on Collective Redress** has no impact at the moment, as its rules are not yet being applied. The directive is likely to have a positive impact on the private enforcement of portability in the future, since collective redress will be available.

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<sup>1</sup> 34 unique service providers as 5 of them were tested for both short-term and long-term portability.

- **Brexit** – the Portability Regulation does not apply any longer in the UK and the UK is now a third country to the EU. EU/EEA subscribers no longer benefit from cross-border portability in the UK unless service providers obtain explicit authorisation from rightholders.

We have identified the following recent **technological developments** that might have an impact on the application of the Portability Regulation:

- The availability of **Content Delivery Networks (CDN) offerings** (with coverage across all Member States) is steadily increasing as the market for CDN services is growing. This evolution is gradually lowering the barrier of entry to provide services across all Member States. CDNs facilitate cross-border portability as they help to ensure the same quality of service while travelling.
- **(Mobile) Adaptive Bit Rate (ABR) technology** enables the smoothest possible audiovisual experience when content is delivered over mobile networks. This technology allows optimisation of the quality of delivery of service on mobile devices further lowering the challenges of providing service across different geographic areas.
- Technological developments facilitating the verification of the Member State of residence that have taken place since 2018. These include:
  - The adoption of **identity networks** based on government ID solutions.
  - Solutions for **identity verification** using passports or identity cards and **image recognition** software.
  - **Decentralised identity networks**<sup>2</sup> based on Blockchain technology.

The adoption of an electronic identification and trust services (eIDAS) Regulation and the evolution of identity networks or other more decentralised identity solutions based on e.g. blockchains could remove the challenge of determining the Member State of residence of a user. Currently, take up of these developments among the surveyed and interviewed service providers is low.

We have identified the following recent **market developments** that might have an impact on the application of the Portability Regulation.

- **The growth of the digital content market** (particularly Video on Demand (VoD), gaming and music) increases the need for and application of the Portability Regulation.
- There is an **increasing demand for cloud-based streaming services** which, in turn, also increases the demand for cross-border portability. Cloud-based streaming services offer greater convenience (e.g. cloud gaming replacing consoles) while also increasing the need for continuous access while travelling (e.g. streaming audiovisual content versus downloading audiovisual content).
- **More smart devices are being used** which increases general demand, usage intensity and the demand for cross-border portability.
- **Video streaming and online gaming on social media are increasingly popular** which also has indirect positive effects on cross-border usage. Social influence is a strong facilitator of service adoption in general and has facilitated a demand for gaming and video-on-demand (VoD).
- **Reduction in travel activities due to COVID-19** has reduced the current demand for cross-border portability.

### Application and impact of the Portability Regulation from the service providers' perspective

#### *How is the subscriber's Member State of residence verified? Are the means used reasonable, proportionate and effective?*

The Portability Regulation obliges service providers to use only the means listed in the Regulation, rely on a maximum of two means and verify the Member State of residence only at the conclusion and upon the renewal of a contract for the provision of an online content service<sup>3</sup>. The study results show that the most common means of verifying the Member State of residence are IP addresses and payment details. These measures are popular because this information was already in the service providers' possession prior to the Regulation. Thus, they continued to use these means to avoid collecting additional and

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<sup>2</sup> A summary of current status and possible future developments:  
<https://www.frontiersin.org/articles/10.3389/fbloc.2019.00017/full>

<sup>3</sup> Service providers also have the possibility to repeat the verification of a Member State of residence in cases of reasonable doubt.

disproportionate information and to make the verification process smooth and seamless for consumers. Payment details and IP addresses are also seen as robust, reliable and the most objective means that can provide realistic information out of the range of means offered in the Portability Regulation. Other verification means used by more than 20% of the surveyed service providers are the billing address or postal address of the user, the place of installation of a set top box, a decoder or a similar device used to supply services to the user and an internet or telephone service supply (or any similar type of) contract.

The general consensus among the interviewed service providers is that the verification means defined in the Regulation are sufficient as service providers have not identified a significant number of abuses or major efforts to circumvent the rules and do not see any incentives for the consumers to do so. However, some service providers (and rightholders) reported that they would prefer to use more means (e.g. four instead of two) and to use them more regularly as this would increase certainty and safety. Since the means to verify a Member State of residence are generally perceived as sufficient, the majority of surveyed service providers do not make use of the possibility to repeat the verification of the Member State of residence in cases of reasonable doubt.

### ***What are the possible conditions or limitations applied to cross-border portability?***

The study results show that cross-border portability is working well in most cases. The following limitations to cross-border portability have been identified: unavailability of content on particular devices or offering cross-border portability only after the consumer enables the cross-border portability feature. In addition, we have identified 10 service providers<sup>4</sup> (representing the audiovisual, sports and music segments) that limit the time of temporary presence to a specific period of time in another Member State or are planning to do so in the future. This period ranges from 14 days to one year. Finally, some limited evidence from the surveys and interviews indicates that some smaller service providers are not always aware of the Portability Regulation, do not apply it and, thus, do not provide cross-border portability to their consumers.

### ***Do free-of-charge service providers offer portability?***

The study results regarding free-of-charge service providers are limited due to the low response rate of this particular stakeholders' sub-group. Eleven free-of-charge service providers participated in the survey and more than half of these apply or are considering applying the Regulation in the future. The rest of the respondents have not opted into the Regulation due to technological constraints (e.g. the need to invest in a technological infrastructure), verification issues (e.g. the need to implement a login space, inform the users and rightholders, privacy concerns) and lack of justification for the application after a cost-benefit analysis. Interviews indicate that two audiovisual public broadcasters have introduced the cross-border portability feature because it was intended and encouraged by the public service broadcaster's mission or the country's government.

### ***What information are service providers providing to consumers on cross-border portability?***

Service providers inform consumers about cross-border portability on various levels. More than half of them (65% of surveyed service providers and 50% of service providers assessed during the contract analysis) informed consumers about the introduction of the cross-border portability feature via different channels (website and updates on contracts or terms and conditions). In addition to this, interview data show that half of the service providers inform consumers on potential differences in quality of service when the consumer is outside of his/her Member State of residence. The respondents state that any potential differences in quality result only from differences in technological infrastructures (such as the internet infrastructure (e.g. slow internet speed)) among countries.

### ***How are service providers ensuring cross-border portability when their content is not provided to the customer directly by them but through service of a third party?***

The results of the study show that about 20% of the surveyed service providers offer their services through the service of a third party. We have identified three models of service provision: (1) generating a link to register for a service directly, (2) allowing customers to buy a service provider's content from a TV set box and (3) selling licences for the use of their content so that this content can be offered inside a website or by the application of a third party. None of these models pose any challenges to ensuring cross-border portability to service providers or third parties.

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<sup>4</sup> Out of 62 surveyed and 38 interviewed service providers (two of the interviewed service providers did not complete the survey).



### *What are the possible challenges and costs related to the application of the Portability Regulation?*

The results of the study show that the introduction of the Portability Regulation has created the following types of costs for service providers:

- **Direct costs arising from changes in the authentication of consumers.** The surveyed service providers offering only music, e-books and game services offered cross-border portability to the same extent as required in the Portability Regulation before the Regulation came into force. Hence, with some exceptions, they did not have any direct costs arising from the application of the Portability Regulation. The situation is different in the audiovisual and sports sectors. Nearly 73% of the surveyed service providers in the audiovisual and sports sectors reported that they had to install or adjust the means used to verify the Member State of residence. With some exceptions, the costs of these adjustments were insignificant.
- **Direct costs arising from changes to technological infrastructures.** None of the surveyed service providers offering only music, e-books and game services needed to make investments into their technical infrastructures to comply with the Portability Regulation. Meanwhile, 65% of the surveyed audiovisual and sports sectors service providers needed to install a new infrastructure, update their existing infrastructure (e.g. make changes in their geo-blocking system, whitelisting EU and EEA IP addresses) or invest in additional services from third parties (e.g. requesting CDN providers to allow access from all EU and EEA countries). The interview data suggest that the changes in technological infrastructures were largely due to the changes that had occurred in the authentication of consumers.
- **Direct costs arising from the revision of contracts with consumers.** Less than half of the surveyed service providers revised their contracts with consumers due to the introduction of the Portability Regulation. The costs of such changes were minor and did not require extensive resources.
- **Direct costs arising from the revision of agreements with rightholders.** 33% of surveyed service providers introduced marginal adjustments in the agreements. The changes consisted of the introduction of a clause on the cross-border portability feature. These changes did not have any impact on their working relationships with rightholders.
- **Indirect costs arising from the need to update technical network infrastructures<sup>5</sup>** in order to ensure the same quality of service in cross-border situations. As the Regulation does not oblige service providers to update their technical infrastructures or to ensure the same quality across borders, no significant indirect costs resulting from the introduction of the Portability Regulation were found.

### *What is the actual use of cross-border portability by consumers?*

Evidence from the service providers' and Eurobarometer<sup>6</sup> surveys show that about a third of European consumers use cross-border portability. However, for many service providers covered by this study, these consumers comprise only a small share of their subscribers (less than 5% per service provider). Consumers who use the cross-border portability feature usually use it only for a short period of time (up to a week or less than 2-3 weeks) and 2-5 times a year.

### *What is the impact of the Regulation on consumers and the way service providers operate?*

The impact of the Portability Regulation on the way service providers operate in the market differs based on the sector where the services are provided. The Portability Regulation had no impact on the majority of surveyed service providers operating only in the music, e-books and game sectors, as most of the services in these sectors were already portable before the Regulation was introduced. The impact of the Regulation on the surveyed and interviewed service providers in the audiovisual and sports sectors was minor with some exceptions. Service providers in these sectors had to introduce changes in the authentication of consumers, in their technological infrastructures, revise contracts with consumers and rightholders. Most of these service providers noted that these changes required only minor technical adjustments or none at all, thus there were no significant additional costs or changes in their daily operations and relationships with rightholders.

<sup>5</sup> The Regulation does not oblige service providers to update their technical infrastructure in order to ensure the same quality across borders, thus the costs arising from the investments in this infrastructure is considered as indirect.

<sup>6</sup> Kantar Public (2019). Flash Eurobarometer 477a: Accessing content online and cross-border portability of online content services. Report prepared at the request of European Commission. Available online at: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

In addition, the interviewed service providers have not faced a significant shift in demand or type of usage of their services that could be attributed to the application of the Portability Regulation. Most of the interviewed service providers attribute the lack of shift in demand to the existing travelling restrictions, to the overall relative newness of the Regulation and to the fact that the Regulation is relevant only for consumers who travel. Despite the lack of evidence, the interviewed service providers (especially in the audiovisual and sports sectors) express the view that the Portability Regulation is a positive development as it provides an additional feature to their services that is valued by their consumers.

### **Assessment of experiences with the implementation of the Portability Regulation by national consumer organisations and authorities**

#### ***What are consumers' general views on the Regulation?***

The surveyed and interviewed consumer organisations and national authorities could not provide any evidence on how familiar or satisfied consumers are with the Portability Regulation. One-third of the interviewed consumer organisations believe that the Regulation did not receive sufficient publicity, which may imply a lack of awareness about the Portability Regulation on the consumers' part.

#### ***What is the impact of the Regulation on consumers?***

The Portability Regulation is generally seen as a positive new development for consumers by surveyed consumer organisations. Half of the surveyed consumer organisations believe it has a significant impact on consumers. They believe that the Regulation reinforces the Digital Single Market and provides a legal basis for organisations' discussions with service providers pursuant to a complaint from a consumer, which implies more successful resolutions of cases. In addition, some of the interviewed consumer organisations have faced a significant decline in complaints they receive regarding consumers' access to online content services when travelling to other Member States since the Portability Regulation came into force. Generally, the respondents think that the limited number of complaints is implied as the result of a combination of reasons, mostly because of the smooth implementation of the Regulation and travel restrictions in the EU due to Covid-19. Limited consumers' awareness of the Regulation may also have had a minor impact on that. However, 50% of the surveyed consumer organisations think that the impact was not significant because the scope of the Regulation is limited to cross-border portability and does not address cross-border access.

#### ***What problems do consumers face when using the portability of online content services? How are these problems dealt with?***

Complaints regarding the Portability Regulation were relatively more visible at the very beginning of the application of the Portability Regulation. The interviewed consumer organisations speculate that service providers were still in the initial stages of the implementation of the Regulation's requirements, thus cross-border portability was not available to its full extent. Currently, the majority of the surveyed consumer organisations have reported not receiving any complaints regarding the Portability Regulation. One fifth (8 out of 40) of the surveyed consumer organisations have received complaints regarding cross-border portability and they focus on the following issues: availability of service, unavailability of certain content or features of the service, verification of the Member State of residence.

When complaints such as these were received, the surveyed and interviewed organisations identified the home country of the service provider, informed consumers of their rights and contacted the service provider (or other authority, which is in a position to contact the service provider) for mediation. This process has usually been sufficient to reach the successful resolution of such cases.

#### ***What are the available enforcement mechanisms? What are the means used for monitoring and raising awareness about the Portability Regulation?***

None of the interviewed consumer organisations have had to resort to any additional enforcement mechanisms regarding Portability Regulation-related issues. However, the following types of potential enforcement or redress measures exist:

- The majority of the surveyed consumer organisations are members of the Consumer Protection Cooperation (CPC) Network and generally see it as an important mechanism.
- Most of the surveyed consumer organisations are aware of Alternative Dispute Resolution (ADR) bodies that could potentially be used regarding Portability Regulation-related issues in their countries. The reported effectiveness of ADR bodies depends on whether participation in their procedures and their decisions is mandatory.

- Some interviewed consumer organisations have also reported alternative national enforcement mechanisms (such as Telecommunications, Audiovisual Media Services Regulatory Authorities and Trade inspections). However, their procedures or effectiveness regarding the Portability Regulation's enforcement are unclear because none of the respondents have used them in practice.

The surveyed consumer organisations and national authorities reported that they have not carried out mystery shopping exercises to check whether service providers apply the Portability Regulation correctly or surveys about consumers' satisfaction with the cross-border portability feature. However, several respondents have conducted awareness-raising campaigns about the Portability Regulation. The campaigns consisted of posting information about the Portability Regulation on organisations' websites, social media pages (e.g. Facebook) and, in some cases, the media (e.g. TV or press).

### **Assessment of possible impacts of the application of the Portability Regulation on rightholders**

#### ***What was rightholders' reception of the Regulation?***

The majority of the interviewed rightholder organisations indicated that the Portability Regulation was perceived as a logical step and an improvement for consumers. However, the interviewed rightholders from the music, e-books and game segments expressed the view that the Regulation was unnecessary for their segments because their licencing practices implied the existence of cross-border portability before the legal intervention.

While the interviewed rightholders agreed that the objective presented in the Regulation was logical, some sports and audiovisual service segments' respondents expressed the following concerns:

- Differences in the implementation of the Regulation may raise issues. In particular, due to the perceived lack of a common understanding of important aspects of the Regulation, e.g. the definition of "temporarily present".
- The importance of good verification methods proposed in the Regulation to ensure that the subscriber is actually a resident of one of the Member States and while travelling, is only doing so temporarily.
- The Regulation was seen as the EU intervening in an area that could have evolved by itself via commercial practice and contractual agreements.

#### ***What is the impact of the Regulation on rightholders (including costs)?***

The Portability Regulation did not have any impact on rightholders in the music, e-books and game sectors because services were fully portable before the Regulation came into effect and, consequently, rightholders did not have to change anything in their operations. The impact of the Regulation on audiovisual and sports content rightholders was marginal. The only observable type of impact was the introduction of changes in licencing agreements by a third of the interviewed rightholder organisations, all representing the sports and audiovisual online content segments. These changes implied some negligible costs – a legal team's time and discussions with their members, service providers and other stakeholders about the Regulation and its application which required some time resources. Overall, rightholders faced no significant costs associated with the implementation of the Portability Regulation and it did not impact their operations.

#### ***What has been the rightholders' experience with the Regulation (including changes to licencing agreements and verification of the Member State of residence)?***

In principle, the Regulation does not require any adaptation of the licencing contracts concluded between rightholders and service providers. In turn, only one third of the interviewed rightholders (representing the sports and audiovisual segments) have made adjustments to their licencing agreements. They have typically incorporated clauses stating that mandatory cross-border portability is now applicable. Due to a lack of bargaining power and lack of awareness, none of the interviewed rightholders have requested a specific means of verification or have waived the obligation to verify the subscriber's Member State of residence. The sports content is an exception as the interviewed organisations indicated discussing the means or only accepting the offers to broadcast their content describing a similar standard of safety to other, previously received, offers. The interviewed rightholders have varying levels of communication with service providers and usually do not obtain any data on cross-border portability. This implies that no misuse has been detected by rightholders.



## RÉSUMÉ

L'objectif global de cette étude est de soutenir la Commission dans l'analyse de l'application du règlement sur la portabilité et de fournir des éléments en vue de la préparation du rapport de la Commission requis par l'article 10 du règlement. Plus précisément, l'étude vise à (1) rassembler des éléments concernant l'application pratique des règles de portabilité par les fournisseurs de services de contenu en ligne, (2) évaluer l'expérience des consommateurs en matière de portabilité transfrontalière des services de contenu en ligne et (3) évaluer les impacts du règlement sur la portabilité sur les fournisseurs de services (en particulier les PME) et les détenteurs de droits (producteurs et distributeurs de contenu).

L'étude s'est appuyée sur les méthodes de collecte de données suivantes :

- La **recherche documentaire** a été principalement utilisée pour examiner la base de connaissances existante (y compris la littérature universitaire) sur la mise en œuvre du règlement sur la portabilité.
- Deux enquêtes en ligne :
  - **Enquête auprès des fournisseurs de services de contenu en ligne.** L'objectif de cette enquête était de recueillir des informations sur la manière dont les fournisseurs de services appliquent le règlement sur la portabilité, sur les défis auxquels ils sont confrontés et sur les coûts et l'impact du règlement. Cette enquête a couru du 15 décembre 2020 au 26 mars 2021. Nous avons reçu 62 réponses, représentant des sondés de différents secteurs, types, tailles et couverture géographique.
  - **Enquête auprès des organisations de consommateurs nationales et européennes et des autorités nationales compétentes.** L'objectif de cette enquête était de recueillir des informations sur l'expérience des consommateurs en matière de portabilité transfrontalière des services de contenu en ligne. Cette enquête a couru du 21 décembre 2020 au 28 février 2021. Nous avons reçu 40 réponses (dont 30 d'organisations de consommateurs et 10 d'autorités de protection des données).
- **L'exercice de client mystère** visait à recueillir des données pour évaluer comment le règlement sur la portabilité est mis en œuvre dans la pratique du point de vue des consommateurs. Au cours de l'exercice de client mystère, l'équipe du projet a testé 39 services de contenu en ligne<sup>7</sup>.
- Des **entretiens** avec 38 fournisseurs de services de contenu en ligne, 11 organisations de consommateurs et 14 organisations de détenteurs de droits visaient à recueillir des informations sur l'impact du règlement sur la portabilité et à approfondir les conclusions des enquêtes.
- **8 études de cas de bonnes pratiques** visant à fournir des exemples de bonnes pratiques illustrant les problèmes rencontrés lors de la mise en œuvre du règlement sur la portabilité.

### Impact des évolutions juridiques, techniques et commerciales récentes sur l'application du règlement sur la portabilité

Nous avons identifié les **développements juridiques** récents suivants qui ont pu avoir un impact sur l'application du règlement sur la portabilité ou qui pourraient l'influencer à l'avenir :

- Le **règlement relatif à la coopération en matière de protection des consommateurs (CPC)** a un impact potentiel sur l'application des règles de portabilité. L'impact est susceptible d'être plus élevé pour les services largement utilisés offerts par des prestataires de services qui opèrent à un niveau paneuropéen.
- Le **règlement sur le géoblocage** n'a aucun impact pour le moment, car l'interdiction d'appliquer des conditions générales d'accès aux biens et aux services différentes ne s'applique pas aux services de contenu en ligne couverts par le règlement sur la portabilité.
- La **directive révisée sur les services de médias audiovisuels (SMA)** n'aura qu'un impact très indirect, le cas échéant (par exemple, l'impact sur les caractéristiques techniques relatives à l'accessibilité).
- La **directive sur les contrats de contenu numérique (DCD)** n'a pas d'impact pour le moment, car ses règles ne sont pas encore en application. La directive a un impact potentiel sur les voies de recours/exécution.
- La **directive sur la transmission en ligne d'émissions de radio et de télévision** facilitera l'acquisition des droits d'auteur pour certaines transmissions en ligne de programmes de radio et de télévision. Elle permettra donc aux radiodiffuseurs de rendre plus facilement leurs programmes disponibles en ligne dans d'autres territoires. Elle pourrait avoir un impact sur la

<sup>7</sup> 34 fournisseurs de services uniques car 5 d'entre eux ont été testés pour la portabilité à court et à long terme.

décision des radiodiffuseurs offrant des services en ligne gratuits d'appliquer ou on le Règlement portabilité. **La directive sur les recours collectifs** n'a pas d'impact pour le moment, car ses règles ne sont pas encore en application. La directive aura probablement un impact positif sur l'application de la portabilité à l'avenir, puisque le recours collectif sera disponible.

- **Brexit** - le règlement sur la portabilité ne s'applique plus au Royaume-Uni et le Royaume-Uni est désormais un pays tiers à l'UE. Les abonnés de l'UE/EEE ne bénéficient plus de la portabilité transfrontalière au Royaume-Uni, sauf si les fournisseurs de services obtiennent une autorisation explicite des détenteurs de droits.

Nous avons identifié les **développements technologiques** récents suivants qui pourraient avoir un impact sur l'application du règlement sur la portabilité :

- La disponibilité des **offres de réseaux de diffusion de contenu (RDC)** (avec une couverture dans tous les États membres) augmente régulièrement, car le marché des services RDC est en pleine croissance. Cette évolution abaisse progressivement la barrière à l'entrée pour fournir des services dans tous les États membres. Les RDC facilitent la portabilité transfrontalière car ils permettent de garantir la même qualité de service lors des déplacements.
- **(Mobile) La technologie ABR (Adaptive Bit Rate)** permet d'obtenir l'expérience audiovisuelle la plus fluide possible lorsque le contenu est diffusé sur des réseaux mobiles. Cette technologie permet d'optimiser la qualité du service sur les appareils mobiles, ce qui réduit les difficultés liées à la fourniture du service dans différentes zones géographiques.
- Les évolutions technologiques facilitant la vérification de l'État membre de résidence qui ont eu lieu depuis 2018. Il s'agit notamment de :
  - L'adoption de **réseaux d'identité** basés sur des solutions d'identification gouvernementales.
  - Les solutions pour la **vérification de l'identité** à l'aide de passeports ou de cartes d'identité et de logiciels de **reconnaissance d'images**.
  - Les **réseaux d'identité décentralisés**<sup>8</sup> basés sur la technologie Blockchain.

L'adoption du règlement sur l'identification électronique et les services de confiance (eIDAS) et l'évolution des réseaux d'identité ou d'autres solutions d'identité plus décentralisées basées, par exemple, sur les blockchains, pourraient faciliter la détermination de l'État membre de résidence de l'utilisateur. Actuellement, l'adoption de ces évolutions parmi les prestataires de services sondés et interrogés est faible.

Nous avons identifié les **développements du marché** récents suivants qui pourraient avoir un impact sur l'application du règlement sur la portabilité.

- **La croissance du marché du contenu numérique** (notamment la vidéo à la demande (VoD), les jeux vidéos et la musique) accroît la nécessité et l'application du règlement sur la portabilité.
- **La demande de services de diffusion en continu basés sur l'informatique dématérialisée est en augmentation**, ce qui accroît également la demande de portabilité transfrontalière. Les services de diffusion en continu basés sur le cloud offrent un plus grand confort (par exemple, le jeu en nuage remplace les consoles) tout en augmentant le besoin d'un accès continu lors des déplacements (par exemple, la diffusion en continu de contenu audiovisuel par rapport au téléchargement de contenu audiovisuel).
- **De plus en plus d'appareils intelligents sont utilisés**, ce qui accroît la demande générale, l'intensité d'utilisation et la demande de portabilité transfrontalière.
- **La diffusion vidéo en continu et les jeux vidéos en ligne sur les réseaux sociaux sont de plus en plus populaires**, ce qui a également des effets positifs indirects sur l'utilisation transfrontalière. L'influence sociale est un puissant facilitateur de l'adoption des services en général et a favorisé la demande de jeux et de vidéo à la demande (VoD).
- **La réduction des activités de voyage due à la pandémie de COVID-19** réduit la demande actuelle de portabilité transfrontalière.

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<sup>8</sup> Le résumé de l'état actuel et des développements futurs possibles : <https://www.frontiersin.org/articles/10.3389/fbloc.2019.00017/full>

## Application et impact du règlement sur la portabilité du point de vue des prestataires de services

### *Comment l'État membre de résidence des abonnés est-il vérifié ? Les moyens utilisés sont-ils raisonnables, proportionnés et efficaces ?*

Le règlement sur la portabilité oblige les fournisseurs de services à n'utiliser que les moyens énumérés dans le règlement, à ne recourir qu'à deux moyens au maximum et à ne vérifier l'État membre de résidence que lors de la conclusion et du renouvellement d'un contrat de fourniture d'un service de contenu en ligne<sup>9</sup>. Les résultats de l'étude montrent que les moyens les plus courants pour vérifier l'État membre de résidence sont l'adresse IP et les détails du paiement. Leur popularité s'expliquent par le fait que les prestataires de services étaient en possession de ces informations avant le règlement. Ils ont donc continué à utiliser ces moyens pour éviter de collecter des informations supplémentaires et disproportionnées et pour que le processus de vérification soit fluide et sans faille pour les consommateurs. Les détails du paiement et les adresses IP sont également considérés comme des moyens solides et fiables, et les plus objectifs pour fournir des informations réalistes parmi l'éventail de moyens proposés dans le règlement sur la portabilité. Les autres moyens de vérification utilisés par plus de 20% des fournisseurs de services interrogés sont l'adresse de facturation ou l'adresse postale de l'utilisateur, le lieu d'installation d'un décodeur ou d'un dispositif similaire utilisé pour la fourniture de services à l'utilisateur et un contrat de fourniture de services internet ou téléphoniques (ou tout autre type de contrat similaire).

Le consensus général parmi les fournisseurs de services interrogés est que les moyens de vérification définis dans le règlement sont suffisants, car les fournisseurs de services n'ont pas identifié un nombre significatif d'abus ou d'efforts majeurs pour contourner les règles et ne voient pas d'incitation pour les consommateurs à le faire. Toutefois, certains prestataires de services (et détenteurs de droits) ont indiqué qu'ils préféreraient utiliser davantage de moyens (par exemple quatre au lieu de deux) et les utiliser plus régulièrement, car cela renforcerait la certitude et la sécurité. Puisque les moyens de vérifier l'État membre de résidence sont généralement perçus comme suffisants, la majorité des prestataires de services interrogés n'utilisent pas la possibilité de répéter la vérification de l'État membre de résidence en cas de doute raisonnable.

### *Quelles sont les éventuelles conditions ou limitations appliquées à la portabilité transfrontalière ?*

Les résultats de l'étude montrent que la portabilité transfrontalière fonctionne bien dans la plupart des cas. Les limites suivantes à la portabilité transfrontalière ont été identifiées : indisponibilité du contenu sur certains appareils ou offre de la portabilité transfrontalière uniquement après que le consommateur ait activé la fonction de portabilité transfrontalière. En outre, nous avons identifié 10 fournisseurs de services<sup>10</sup> (représentant les segments de l'audiovisuel, du sport et de la musique) qui limitent la durée de présence temporaire dans un autre État membre ou qui prévoient de le faire à l'avenir. Cette période va de 14 jours à un an. Enfin, certains éléments limités issus des enquêtes et des entretiens indiquent que certains petits fournisseurs de services ne sont pas toujours au courant du règlement sur la portabilité, ne l'appliquent pas et, par conséquent, ne fournissent pas la portabilité transfrontalière à leurs consommateurs.

### *Les fournisseurs de services gratuits offrent-ils la portabilité ?*

Les résultats de l'étude concernant les prestataires de services gratuits sont limités, en raison du faible taux de réponse de ce sous-groupe de parties prenantes. Onze fournisseurs de services gratuits ont participé à l'enquête et plus de la moitié d'entre eux appliquent ou envisagent d'appliquer le règlement à l'avenir. Le reste des sondés n'a pas opté pour le règlement en raison de contraintes technologiques (par exemple, la nécessité d'investir dans une infrastructure technologique), de problèmes de vérification (par exemple, la nécessité de mettre en place un espace de connexion, d'informer les utilisateurs et les détenteurs de droits, des préoccupations liées à la vie privée) et de l'absence de justification de l'application après une analyse coûts-avantages. Les entretiens indiquent que deux radiodiffuseurs publics audiovisuels ont introduit la fonction de portabilité transfrontalière parce qu'elle était prévue et encouragée par la mission du radiodiffuseur de service public ou par le gouvernement du pays.

<sup>9</sup> Les prestataires de services ont également la possibilité de réitérer la vérification de l'État membre de résidence en cas de doute raisonnable.

<sup>10</sup> Sur 62 prestataires de services interrogés et 38 interviewés (deux des prestataires de services interviewés n'ont pas rempli l'enquête).

### **Quelles informations les prestataires de services fournissent-ils aux consommateurs sur la portabilité transfrontalière ?**

Les prestataires de services informent les consommateurs de la portabilité transfrontalière à différents niveaux. Plus de la moitié d'entre eux (65% des prestataires de services interrogés et 50% des prestataires de services évalués lors de l'analyse des contrats) ont informé les consommateurs de l'introduction de la fonction de portabilité transfrontalière par différents canaux (site web et contrats ou mises à jour des conditions générales). En outre, les données issues des entretiens montrent que la moitié des prestataires de services informent les consommateurs sur les différences potentielles de qualité de service lorsque le consommateur se trouve en dehors de son État membre de résidence. Les personnes interrogées déclarent que les différences potentielles de qualité résultent uniquement des différences d'infrastructures technologiques (telles que l'infrastructure internet (par exemple, la lenteur du débit internet) entre les pays.

### **Comment les fournisseurs de services assurent-ils la portabilité transfrontalière lorsque leur contenu n'est pas fourni au client directement par eux mais par le biais d'un service tiers ?**

Les résultats de l'étude montrent qu'environ 20% des fournisseurs de services interrogés offrent leurs services par l'intermédiaire d'un service tiers. Nous avons identifié trois modèles de fourniture de services : (1) la création d'un lien permettant de s'inscrire directement à un service, (2) la possibilité d'acheter le contenu du fournisseur de services à partir d'un décodeur pour télévision et (3) la vente de licences pour certains de leurs contenus afin que ceux-ci puissent être proposés sur le site web ou l'application du tiers. Aucun de ces modèles ne pose de problème pour assurer la portabilité transfrontalière aux fournisseurs de services ou aux tiers.

### **Quels sont les défis et les coûts éventuels liés à l'application du règlement sur la portabilité ?**

Les résultats de l'étude montrent que l'introduction du règlement sur la portabilité a engendré les types de coûts suivants pour les prestataires de services :

- **Coûts directs résultant des changements dans l'authentification des consommateurs.** Les fournisseurs de services interrogés offrant uniquement des services de musique, de livres électroniques et de jeux offraient la portabilité transfrontalière dans la même mesure que celle requise par le règlement sur la portabilité avant l'entrée en vigueur de ce dernier. Par conséquent, à quelques exceptions près, ils n'ont pas eu de coûts directs liés à l'application du règlement sur la portabilité. La situation est différente dans les secteurs de l'audiovisuel et du sport. Près de 73% des prestataires de services interrogés dans les secteurs de l'audiovisuel et du sport ont déclaré avoir dû installer ou ajuster les moyens utilisés pour vérifier l'État membre de résidence. À quelques exceptions près, les coûts de ces ajustements étaient insignifiants.
- **Coûts directs résultant des changements dans l'infrastructure technologique.** Aucun des fournisseurs de services interrogés offrant uniquement des services de musique, de livres électroniques et de jeux n'a dû investir dans l'infrastructure technique pour se conformer au règlement sur la portabilité. En revanche, 65% des fournisseurs de services des secteurs de l'audiovisuel et du sport interrogés ont dû installer une nouvelle infrastructure, mettre à jour leur infrastructure existante (par exemple, en modifiant le système de géoblocage, en établissant une liste blanche des adresses IP de l'UE et de l'EEE) ou investir dans des services supplémentaires fournis par des tiers (par exemple, en demandant aux fournisseurs de RDC d'autoriser l'accès depuis tous les pays de l'UE et de l'EEE). Les données issues des entretiens suggèrent que les changements apportés à l'infrastructure technologique sont en grande partie dus aux changements dans l'authentification des consommateurs.
- **Coûts directs découlant de la révision des contrats avec les consommateurs.** Moins de la moitié des prestataires de services interrogés ont révisé leurs contrats avec les consommateurs en raison de l'introduction du règlement sur la portabilité. Les coûts de ces changements étaient mineurs et ne nécessitaient pas de ressources importantes.
- **Coûts directs découlant de la révision des accords avec les détenteurs de droits.** 33% des prestataires de services interrogés ont introduit des ajustements marginaux dans les accords. Ces modifications consistaient en l'introduction d'une clause sur la fonction de portabilité transfrontalière. Ces changements n'ont pas eu d'impact sur leurs relations de travail avec les détenteurs de droits.



- **Coûts indirects découlant de la nécessité de mettre à jour l'infrastructure technique du réseau**<sup>11</sup> afin d'assurer la même qualité de service au-delà des frontières. Comme le règlement n'oblige pas les fournisseurs de services à mettre à jour leur infrastructure technique et à garantir la même qualité au-delà des frontières, aucun coût indirect significatif résultant de l'introduction du règlement sur la portabilité n'a été constaté.

#### *Quelle est l'utilisation réelle de la portabilité transfrontalière par les consommateurs ?*

Les résultats des enquêtes auprès des prestataires de services et de l'Eurobaromètre<sup>12</sup> montrent qu'environ un tiers des consommateurs européens utilisent la portabilité transfrontalière. Cependant, pour de nombreux fournisseurs de services couverts par cette étude, ces consommateurs ne représentent qu'une petite partie de leurs abonnés (moins de 5% par fournisseur de services). Les consommateurs qui utilisent la fonction de portabilité transfrontalière, l'utilisent généralement pour une courte période (jusqu'à une semaine ou moins de 2-3 semaines) et 2-5 fois par an.

#### *Quel est l'impact du règlement sur les consommateurs et sur le mode de fonctionnement des prestataires de services ?*

L'impact du règlement sur la portabilité sur la façon dont les fournisseurs de services opèrent sur le marché diffère selon le secteur dans lequel les services sont fournis. Le règlement sur la portabilité n'a pas eu d'impact sur la majorité des fournisseurs de services interrogés opérant uniquement dans les secteurs de la musique, des livres électroniques et des jeux vidéo, car la plupart des services dans ces secteurs étaient déjà portables avant l'introduction du règlement. L'impact du règlement sur les fournisseurs de services interrogés dans les secteurs de l'audiovisuel et du sport a été mineur, à quelques exceptions près. Les fournisseurs de services dans ces secteurs ont dû introduire des changements dans l'authentification des consommateurs, dans l'infrastructure technologique, réviser les contrats avec les consommateurs et les détenteurs de droits. La plupart de ces fournisseurs de services ont indiqué que ces changements ne nécessitaient pas ou peu d'ajustements techniques, et qu'il n'y avait donc pas de coûts supplémentaires significatifs ou de changements dans les opérations quotidiennes et les relations avec les détenteurs de droits.

En outre, les prestataires de services interrogés n'ont pas été confrontés à un changement significatif de la demande ou du type d'utilisation de leurs services qui pourrait être attribué à l'application du règlement sur la portabilité. La plupart des prestataires de services interrogés attribuent l'absence d'évolution de la demande aux restrictions existantes en matière de voyages, à la relative nouveauté du règlement et au fait que le règlement ne concerne que les consommateurs qui voyagent. Malgré le manque de preuves, les prestataires de services interrogés (en particulier dans les secteurs de l'audiovisuel et du sport) estiment que le règlement sur la portabilité est une évolution positive, car il apporte à leurs services une fonctionnalité supplémentaire appréciée par leurs consommateurs.

### **Évaluation de l'expérience de la mise en œuvre du règlement sur la portabilité par les organisations et autorités nationales de consommateurs**

#### *Quel est l'avis général des consommateurs sur le règlement ?*

Les organisations de consommateurs et les autorités nationales interrogées n'ont pas été en mesure de fournir des informations sur le degré de connaissance ou de satisfaction des consommateurs à l'égard du règlement sur la portabilité. Un tiers des organisations de consommateurs interrogées estiment que le règlement n'a pas fait l'objet d'une publicité suffisante, ce qui peut impliquer un manque de connaissance du règlement sur la portabilité de la part des consommateurs.

#### *Quel est l'impact du règlement sur les consommateurs ?*

Le règlement sur la portabilité est généralement considéré comme une nouveauté positive pour les consommateurs par les organisations de consommateurs interrogées. La moitié des organisations de consommateurs interrogées estiment qu'il a un impact significatif sur les consommateurs. Elles estiment

<sup>11</sup> Le règlement n'oblige pas les fournisseurs de services à mettre à jour leur infrastructure technique afin d'assurer la même qualité au-delà des frontières, les coûts découlant des investissements dans cette infrastructure sont donc considérés comme indirects.

<sup>12</sup> Kantar Public (2019). Flash Eurobaromètre 477a : Accès au contenu en ligne et portabilité transfrontalière des services de contenu en ligne. Rapport préparé à la demande de la Commission européenne. Disponible en ligne à l'adresse <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

que le règlement renforce le marché unique numérique et fournit une base juridique pour les discussions des organisations avec les fournisseurs de services suite à une plainte d'un consommateur, ce qui implique une meilleure résolution des cas. En outre, certaines des organisations de consommateurs interrogées ont été confrontées à une baisse significative des plaintes qu'elles reçoivent concernant l'accès des consommateurs aux services de contenu en ligne lorsqu'ils voyagent dans d'autres Etats membres depuis l'entrée en vigueur du règlement sur la portabilité. En général, les personnes interrogées pensent que le nombre limité de plaintes est dû à une combinaison de raisons, principalement à la bonne mise en œuvre du règlement et aux restrictions de déplacement dans l'UE en raison de la pandémie de COVID-19. La connaissance limitée du règlement par les consommateurs peut également avoir eu un impact mineur sur ce point. Toutefois, 50 % des organisations de consommateurs interrogées pensent que l'impact n'est pas significatif, car le champ d'application du règlement se limite à la portabilité transfrontalière et ne concerne pas l'accès transfrontalier.

### ***Quels problèmes les consommateurs rencontrent-ils lorsqu'ils utilisent la portabilité des services de contenu en ligne ? Comment ces problèmes sont-ils traités ?***

Les plaintes concernant le règlement sur la portabilité étaient relativement plus importantes au tout début de l'application du règlement sur la portabilité. Les organisations de consommateurs interrogées pensent que les fournisseurs de services en étaient encore aux premiers stades de la mise en œuvre des exigences du règlement et que la portabilité transfrontalière n'était donc pas disponible dans toute son ampleur. Actuellement, la majorité des organisations de consommateurs interrogées ont déclaré n'avoir reçu aucune plainte concernant le règlement sur la portabilité. Un cinquième (8 sur 40) des organisations de consommateurs interrogées ont reçu des plaintes concernant la portabilité transfrontalière et portant sur les questions suivantes : questions liées à la disponibilité du service, questions liées à l'indisponibilité de certains contenus ou fonctionnalités du service, questions liées à la vérification de l'Etat membre de résidence.

Lorsque de telles plaintes ont été reçues, les organisations interrogées ont identifié le pays d'origine du prestataire de services, ont informé les consommateurs de leurs droits et ont contacté le prestataire de services (ou une autre autorité en mesure de contacter le prestataire de services) pour une médiation. Ce processus est généralement suffisant pour parvenir à une résolution positive de ces cas.

### ***Quels sont les mécanismes d'application disponibles ? Quels sont les moyens utilisés pour le suivi et la sensibilisation au règlement sur la portabilité ?***

Aucune des organisations de consommateurs interrogées n'a eu à recourir à un mécanisme d'application supplémentaire concernant des questions liées au règlement sur la portabilité. Cependant, les types suivants de mesures d'application ou de recours potentiels existent :

- La majorité des organisations de consommateurs interrogées sont membres du réseau de coopération pour la protection des consommateurs (CPC) et le considèrent généralement comme un mécanisme important.
- La plupart des organisations de consommateurs interrogées connaissent l'existence d'organismes de mode alternatifs de résolution des différends (MARD) qui pourraient être utilisés pour les questions liées au règlement sur la portabilité dans leur pays. L'efficacité des organismes MARD dépend du caractère obligatoire ou non de la participation à leurs procédures et à leurs décisions.
- Certaines organisations de consommateurs interrogées ont également fait état d'autres mécanismes nationaux d'application (tels que les autorités de régulation des télécommunications et des services de médias audiovisuels et les inspections commerciales). Toutefois, leurs procédures ou leur efficacité en ce qui concerne l'application du règlement sur la portabilité ne sont pas claires, car aucune des personnes interrogées ne les a utilisées dans les faits.

Les organisations de consommateurs et les autorités nationales interrogées ont indiqué qu'elles n'avaient pas mené d'enquêtes de client mystère pour vérifier si les prestataires de services appliquaient correctement le règlement sur la portabilité, ni d'enquêtes sur la satisfaction des consommateurs à l'égard de la fonction de portabilité transfrontalière. Cependant, plusieurs sondés ont mené des campagnes de sensibilisation concernant le règlement sur la portabilité. Ces campagnes consistaient à publier des informations sur le règlement sur la portabilité sur les sites web des organisations, sur les pages des réseaux sociaux (par exemple Facebook) et, dans certains cas, dans les médias (par exemple la télévision ou la presse).

## Évaluation des impacts éventuels de l'application du règlement sur la portabilité sur les détenteurs de droits

### *Comment les détenteurs de droits ont-ils accueilli le règlement ?*

La majorité des organisations de détenteurs de droits interrogées ont indiqué que le règlement sur la portabilité était perçu comme une évolution logique et une amélioration pour les consommateurs. Toutefois, les détenteurs de droits interrogés dans les secteurs de la musique, des livres électroniques et des jeux vidéos ont estimé que le règlement n'était pas nécessaire pour leurs secteurs, car leurs pratiques de licences couvraient déjà la portabilité transfrontalière avant l'entrée en vigueur du règlement.

Si les détenteurs de droits interrogés s'accordent sur les objectifs du règlement, certains segments des services sportifs et audiovisuels ont exprimé les préoccupations suivantes :

- Les différences dans la mise en œuvre du règlement peuvent générer des problèmes, notamment en raison de l'absence apparente d'une compréhension commune d'aspects importants du règlement, tels que la notion de « présence temporaire ».
- L'importance des bonnes méthodes de vérification proposées dans le règlement pour s'assurer que l'abonné est effectivement résident d'un des États membres et que, lorsqu'il voyage, il ne le fait que temporairement.
- Le règlement a été considéré comme une intervention de l'UE dans une sphère qui aurait pu évoluer par le biais de pratiques commerciales et d'accords contractuels.

### *Quel est l'impact du règlement sur les détenteurs de droits (y compris les coûts) ?*

Le règlement sur la portabilité n'a pas eu d'impact sur les détenteurs de droits dans les secteurs de la musique, des livres électroniques et des jeux vidéos, car les services étaient entièrement portables avant l'entrée en vigueur du règlement et, par conséquent, les détenteurs de droits n'ont pas eu à modifier leur fonctionnement. L'impact du règlement sur les détenteurs de droits sur les contenus audiovisuels et sportifs a été marginal. Le seul type d'impact observable a été l'introduction de changements dans les accords de licence par un tiers des organisations d'ayants droit interrogées, toutes représentant les segments du sport et du contenu audiovisuel en ligne. Ces changements ont entraîné quelques coûts négligeables - le temps de l'équipe juridique et les discussions avec leurs membres, les fournisseurs de services et d'autres parties prenantes sur le règlement et son application - qui ont nécessité quelques ressources en temps. Dans l'ensemble, les détenteurs de droits n'ont pas eu à faire face à des coûts importants liés à la mise en œuvre du règlement sur la portabilité et celui-ci n'a pas eu d'incidence sur leur fonctionnement.

### *Quelle est l'expérience des détenteurs de droits avec le règlement (y compris les modifications apportées aux accords de licence et la vérification de l'État membre de résidence) ?*

En principe, le règlement n'exige pas l'adaptation des contrats de licence conclus entre les détenteurs de droits et les prestataires de services. Seul un tiers des détenteurs de droits interrogés (représentant les segments du sport et de l'audiovisuel) ont procédé à des adaptations de leurs contrats de licence. Ils ont généralement intégré des clauses stipulant que la portabilité transfrontalière obligatoire est désormais en vigueur. En raison de l'absence de pouvoir de négociation et du manque de sensibilisation, aucun des détenteurs de droits interrogés n'a demandé des moyens de vérification spécifiques ou n'a renoncé à l'obligation de vérifier l'État membre de résidence de l'abonné. Le contenu sportif est une exception, car les organisations interrogées ont indiqué avoir discuté des moyens de vérification, ou avoir accepté les offres de diffusion de leur contenu assurant un certain niveau de sécurité. Les détenteurs de droits interrogés ont des niveaux de communication variables avec les fournisseurs de services et n'obtiennent généralement aucune donnée sur la portabilité transfrontalière. Cela implique qu'aucun abus n'a été détecté par les détenteurs de droits.

## KURZFASSUNG

Das übergeordnete Ziel dieser Studie ist es, die Kommission bei der Bewertung der Anwendung der Portabilitätsverordnung zu unterstützen und Beiträge im Hinblick auf die Erstellung des in Artikel 10 der Verordnung geforderten Berichts der Kommission zu liefern. Konkret zielte die Studie darauf ab, (1) Erkenntnisse über die praktische Anwendung der Portabilitätsregeln durch Anbieter von Online-Inhaltendiensten zu sammeln, (2) die Erfahrungen der Verbraucher mit der grenzüberschreitenden Portabilität von Online-Inhaltendiensten zu bewerten und (3) die Auswirkungen der Portabilitätsverordnung auf Diensteanbieter (insbesondere KMU) und Rechteinhaber (Produzenten und Vertrieber von Inhalten) zu beurteilen.

Die Studie stützte sich auf die folgenden Methoden der Datenerfassung:

- **Desk Research** wurde hauptsächlich dazu verwendet, die vorhandene Wissensbasis (inkl. akademischer Literatur) zur Umsetzung der Portabilitätsverordnung zu überprüfen.
- Zwei Online-Umfragen:
  - **Umfrage unter Anbietern von Online-Inhaltendiensten.** Das Ziel dieser Umfrage war es, Informationen darüber zu sammeln, wie Diensteanbieter die Portabilitätsverordnung anwenden, welchen Herausforderungen sie gegenüberstehen und wie hoch die Kosten und Auswirkungen der Verordnung sind. Diese Umfrage war vom 15. Dezember 2020 bis zum 26. März 2021 für Antworten geöffnet. Wir haben 62 Antworten erhalten, die Teilnehmer aus verschiedenen Branchen, Typen, Größen und geografischen Bereichen repräsentieren.
  - **Umfrage bei nationalen und europäischen Verbraucherorganisationen und relevanten nationalen Behörden.** Das Ziel dieser Umfrage war es, Informationen über die Erfahrungen der Verbraucher mit der grenzüberschreitenden Portabilität von Online-Inhaltendiensten zu sammeln. Diese Umfrage war vom 21. Dezember 2020 bis zum 28. Februar 2021 für Antworten geöffnet. Wir haben 40 Antworten erhalten (davon 30 von Verbraucherorganisationen und 10 von Datenschutzbehörden).
- Ziel des **Mystery Shoppings** war es, Daten zu sammeln, um zu beurteilen, wie die Portabilitätsverordnung in der Praxis aus der Sicht der Verbraucher umgesetzt wird. Während des Testkaufs testete das Projektteam 39 Online-Content-Dienste<sup>13</sup>.
- **Interviews** mit 38 Anbietern von Online-Inhaltendiensten, 11 Verbraucherorganisationen und 14 Organisationen von Rechteinhabern sollten Informationen über die Auswirkungen der Portabilitätsverordnung sammeln und die Ergebnisse der Umfragen weiter untersuchen.
- **8 Fallstudien mit Good-Practice-Beispielen** zielten darauf ab, anschauliche Good-Practice-Beispiele zu liefern, die sich mit Problemen bei der Implementierung der Portabilitätsverordnung befassen.

### Auswirkungen der jüngsten rechtlichen, technischen und Marktentwicklungen auf die Anwendung der Portabilitätsverordnung

Wir haben die folgenden aktuellen **rechtlichen Entwicklungen** identifiziert, die sich auf die Anwendung der Portabilitätsverordnung ausgewirkt haben oder sie in Zukunft beeinflussen könnten:

- **Die Verordnung über die Zusammenarbeit im Verbraucherschutz (CPC)** hat einen potenziellen Einfluss auf die Durchsetzung der Portabilitätsregeln. Die Auswirkungen werden wahrscheinlich bei stark genutzten Diensten, die von europaweit agierenden Dienstleistern angeboten werden, höher sein.
- **Die Geo-Blocking-Verordnung** hat derzeit keine Auswirkungen, da das Verbot zur Anwendung verschiedener Geschäftsbedingungen über den Zugang zu Gütern und Dienstleistungen nicht für die Online-Inhaltendienste gilt, die unter die Portabilitätsverordnung fallen.
- **Die überarbeitete Richtlinie über audiovisuelle Mediendienste (AVMD)** wird, wenn überhaupt, nur sehr indirekte Auswirkungen haben (z. B. Auswirkungen auf technische Merkmale in Bezug auf die Zugänglichkeit).
- **Die Richtlinie über Verträge über digitale Inhalte (DCD)** hat derzeit keine Auswirkungen, da ihre Regeln noch nicht in Kraft sind. Die Richtlinie hat einen potenziellen Einfluss auf Rechtsmittel/Durchsetzung.

<sup>13</sup> 34 einzigartige Diensteanbieter, da 5 von ihnen sowohl auf kurzfristige als auch auf langfristige Übertragbarkeit getestet wurden.



- **Die Richtlinie zur Online-Übertragung von Sendungen** wird die Freigabe von Urheberrechten für bestimmte Online-Übertragungen von Radio- und Fernsehprogrammen erleichtern. Damit wird es für die Sender einfacher, ihre Programme in anderen Gebieten online verfügbar zu machen. Sie könnte weiterhind die Entscheidung von Sendeanstalten, die kostenlos Online-Inhaltedienste bereitstellen, dahingehend beeinflussen, dass sie sich entscheiden, die Portabilitätsverordnung anzuwenden.
- **Die Richtlinie zur kollektiven Rechtsdurchsetzung** hat im Moment keine Auswirkungen, da ihre Regeln noch nicht in Kraft sind. Die Richtlinie wird sich in Zukunft wahrscheinlich positiv auf die private Durchsetzung der Portabilität auswirken, da kollektive Rechtsmittel zur Verfügung stehen werden.
- **Brexit** - die Portabilitätsverordnung gilt in Großbritannien nicht mehr und das Vereinigte Königreich ist nun ein Drittland der EU. EU/EWR-Abonnenten profitieren nicht mehr von der grenzüberschreitenden Portabilität in Großbritannien, es sei denn, die Dienstanbieter erhalten eine ausdrückliche Genehmigung von den Rechteinhabern.

Wir haben die folgenden jüngsten **technologischen Entwicklungen** identifiziert, die Auswirkungen auf die Anwendung der Portabilitätsverordnung haben könnten:

- Die Verfügbarkeit von **Content-Delivery-Networks (CDN) -Angeboten** (mit Abdeckung in allen Mitgliedsstaaten) nimmt stetig zu, da der Markt für CDN-Dienste wächst. Diese Entwicklung senkt allmählich die Eintrittsbarriere für die Erbringung von Dienstleistungen in allen Mitgliedsstaaten. CDNs erleichtern die grenzüberschreitende Portabilität, da sie dazu beitragen, unterwegs die gleiche Servicequalität zu gewährleisten.
- **(Mobile) Adaptive Bit Rate (ABR)-Technologie** ermöglicht ein möglichst reibungsloses audiovisuelles Erlebnis, wenn der Inhalt über mobile Netzwerke übertragen wird. Diese Technologie ermöglicht es, die Servicequalität auf mobilen Geräten zu optimieren und so die Herausforderungen bei der Bereitstellung des Dienstes über verschiedene geografische Gebiete hinweg zu verringern.
- Technologische Entwicklungen, die die Überprüfung des Wohnsitzmitgliedstaates erleichtern, die seit 2018 stattgefunden haben. Dazu gehören:
  - Die Einführung von **Identitätsnetzwerken**, die auf staatlichen ID-Lösungen basieren.
  - Lösungen zur **Identitätsprüfung** mit Hilfe von Pässen oder Personalausweisen und **Bilderkennungssoftware**.
  - **Dezentrale Identitätsnetzwerke**<sup>14</sup> basierend auf der Blockchain-Technologie.

Die Annahme der Verordnung über elektronische Identifizierungs- und Vertrauensdienste (eIDAS) und die Entwicklung von Identitätsnetzwerken oder anderen dezentralen Identitätslösungen, die z. B. auf Blockchains basieren, könnten die Herausforderung der Bestimmung des Wohnsitzmitgliedstaates des Benutzers beseitigen. Derzeit ist die Akzeptanz dieser Entwicklungen bei den befragten und interviewten Dienstleistern gering.

Wir haben die folgenden aktuellen **Marktentwicklungen** identifiziert, die einen Einfluss auf die Anwendung der Portabilitätsverordnung haben könnten.

- **Das Wachstum des Marktes für digitale Inhalte** (insbesondere Video on Demand (VoD), Spiele und Musik) erhöht den Bedarf an und die Anwendung der Portabilitätsverordnung.
- Es gibt eine **steigende Nachfrage nach Cloud-basierten Streaming-Diensten**, was wiederum auch die Nachfrage nach grenzüberschreitender Portabilität erhöht. Cloud-basierte Streaming-Dienste bieten einen höheren Komfort (z. B. Cloud-Gaming ersetzt Konsolen), erhöhen aber auch den Bedarf an kontinuierlichem Zugriff von unterwegs (z. B. Streaming von audiovisuellen Inhalten gegenüber dem Herunterladen von audiovisuellen Inhalten).
- **Es werden mehr intelligente Geräte verwendet**, was den allgemeinen Bedarf, die Nutzungsintensität und die Nachfrage nach grenzüberschreitender Portabilität erhöht.
- **Videostreaming und Online-Spiele auf sozialen Medien werden immer beliebter**, was sich indirekt auch positiv auf die grenzüberschreitende Nutzung auswirkt. Sozialer Einfluss ist ein starker Faktor für die Annahme von Diensten im Allgemeinen und hat die Nachfrage nach Spielen und Video-on-Demand (VoD) gefördert.

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<sup>14</sup> Die Zusammenfassung des aktuellen Status und möglicher zukünftiger Entwicklungen: <https://www.frontiersin.org/articles/10.3389/fbloc.2019.00017/full>

- Die **Reduzierung der Reisetätigkeit aufgrund von COVID-19** reduziert die aktuelle Nachfrage nach grenzüberschreitender Portabilität.

## **Anwendung und Auswirkungen der Portabilitätsverordnung aus Sicht der Diensteanbieter**

### ***Wie wird der Wohnsitzmitgliedstaat des Abonnenten überprüft? Sind die eingesetzten Mittel angemessen, verhältnismäßig und wirksam?***

Die Portabilitätsverordnung verpflichtet Diensteanbieter, nur die in der Verordnung aufgeführten Mittel zu verwenden, sich auf maximal zwei Mittel zu stützen und den Wohnsitzmitgliedstaat nur beim Abschluss und bei der Erneuerung eines Vertrags über die Bereitstellung eines Online-Inhaltendienstes<sup>15</sup> zu überprüfen. Die Ergebnisse der Studie zeigen, dass die häufigsten Mittel zur Verifizierung des Wohnsitzlandes die IP-Adresse und die Zahlungsdetails sind. Diese Maßnahmen sind beliebt, da sich diese Informationen bereits vor der Verordnung im Besitz der Diensteanbieter befanden. So nutzten sie diese Mittel weiterhin, um das Sammeln zusätzlicher und unverhältnismäßiger Informationen zu vermeiden und den Verifizierungsprozess für die Verbraucher reibungslos und nahtlos zu gestalten. Zahlungsdaten und IP-Adressen werden auch als robuste, zuverlässige und die objektivsten Mittel angesehen, die realistische Informationen aus der Palette der in der Portabilitätsverordnung angebotenen Mittel liefern können. Andere Verifizierungsmittel, die von mehr als 20 % der befragten Diensteanbieter verwendet werden, sind die Rechnungsadresse oder die Postadresse des Benutzers, der Installationsort einer Set-Top-Box, eines Decoders oder eines ähnlichen Geräts, das für die Bereitstellung von Diensten für den Benutzer verwendet wird, und ein Internet- oder Telefondienstleistungsvertrag (oder eine ähnliche Art von Vertrag).

Der allgemeine Konsens unter den befragten Diensteanbietern ist, dass die in der Verordnung definierten Überprüfungsmöglichkeiten ausreichend sind, da die Diensteanbieter keine nennenswerte Anzahl von Missbräuchen oder größere Anstrengungen zur Umgehung der Regeln festgestellt haben und keine Anreize für die Verbraucher sehen, dies zu tun. Einige Dienstleister (und Rechteinhaber) berichteten jedoch, dass sie es vorziehen würden, mehr Mittel (z. B. vier statt zwei) einzusetzen und diese regelmäßiger zu verwenden, da dies die Gewissheit und Sicherheit erhöhen würde. Da die Mittel zur Überprüfung des Wohnsitzmitgliedstaates als ausreichend empfunden werden, nutzt die Mehrheit der befragten Dienstleister nicht die Möglichkeit, die Überprüfung des Wohnsitzmitgliedstaates im Falle eines begründeten Zweifels zu wiederholen.

### ***Was sind die möglichen Bedingungen oder Einschränkungen für die grenzüberschreitende Portabilität?***

Studienergebnisse zeigen, dass die grenzüberschreitende Portabilität in den meisten Fällen gut funktioniert. Die folgenden Einschränkungen für die grenzüberschreitende Portabilität wurden festgestellt: Nichtverfügbarkeit von Inhalten auf bestimmten Geräten oder das Anbieten der grenzüberschreitenden Portabilität nur, nachdem der Verbraucher die Funktion für die grenzüberschreitende Portabilität aktiviert hat. Darüber hinaus haben wir 10 Dienstleister<sup>16</sup> (aus den Bereichen audiovisuelle Medien, Sport und Musik) identifiziert, die die Zeit der vorübergehenden Präsenz in einem anderen Mitgliedstaat auf einen bestimmten Zeitraum beschränken oder dies für die Zukunft planen. Dieser Zeitraum reicht von 14 Tagen bis zu einem Jahr. Schließlich deuten einige begrenzte Hinweise aus den Umfragen und Interviews darauf hin, dass einige kleinere Diensteanbieter die Portabilitätsverordnung nicht immer kennen, sie nicht anwenden und somit ihren Kunden keine grenzüberschreitende Portabilität bieten.

### ***Bieten kostenlose Diensteanbieter Portabilität an?***

Die Studienergebnisse in Bezug auf kostenlose Dienstleister sind begrenzt, da die Rücklaufquote dieser Stakeholder-Untergruppe gering ist. Elf kostenlose Dienstleister haben an der Umfrage teilgenommen und mehr als die Hälfte von ihnen wenden die Verordnung an oder erwägen, sie in Zukunft anzuwenden. Der Rest der Befragten hat sich nicht für die Verordnung entschieden, und zwar aufgrund von technologischen Einschränkungen (z. B. die Notwendigkeit, in die technologische Infrastruktur zu investieren), Verifizierungsproblemen (z. B. die Notwendigkeit, einen Login-Bereich zu implementieren,

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<sup>15</sup> Diensteanbieter haben auch die Möglichkeit, die Überprüfung des Wohnsitzmitgliedstaates im Falle eines begründeten Zweifels zu wiederholen.

<sup>16</sup> Von 62 befragten und 38 interviewten Dienstleistern (zwei der befragten Dienstleister haben die Umfrage nicht abgeschlossen).

die Benutzer und Rechteinhaber zu informieren, Bedenken hinsichtlich des Datenschutzes) und einer fehlenden Rechtfertigung der Anwendung nach einer Kosten-Nutzen-Analyse. Aus den Interviews geht hervor, dass zwei audiovisuelle öffentlich-rechtliche Rundfunkanstalten die Funktion der grenzüberschreitenden Portabilität eingeführt haben, weil dies vom Auftrag der öffentlich-rechtlichen Rundfunkanstalt oder der Regierung des Landes beabsichtigt und gefördert wurde.

### ***Welche Informationen stellen die Dienstanbieter den Verbrauchern zur grenzüberschreitenden Portabilität zur Verfügung?***

Dienstanbieter informieren Verbraucher auf verschiedenen Ebenen über die grenzüberschreitende Portabilität. Mehr als die Hälfte von ihnen (65 % der befragten Dienstanbieter und 50 % der bei der Vertragsanalyse bewerteten Dienstanbieter) haben die Verbraucher über die Einführung der grenzüberschreitenden Portabilitätsfunktion über verschiedene Kanäle (Website und Verträge oder Aktualisierungen der Geschäftsbedingungen) informiert. Darüber hinaus zeigen die Befragungsdaten, dass die Hälfte der Dienstleister die Verbraucher über mögliche Unterschiede in der Servicequalität informiert, wenn sich der Verbraucher außerhalb seines Wohnsitzlandes befindet. Die Befragten geben an, dass mögliche Qualitätsunterschiede nur aus Unterschieden in der technologischen Infrastruktur (wie z.B. der Internet-Infrastruktur (z.B. langsame Internetgeschwindigkeit)) zwischen den Ländern resultieren.

### ***Wie stellen Diensteanbieter die grenzüberschreitende Portabilität sicher, wenn ihre Inhalte dem Kunden nicht direkt von ihnen, sondern über einen Dienst eines Dritten zur Verfügung gestellt werden?***

Die Ergebnisse der Studie zeigen, dass ca. 20% der befragten Dienstleister ihre Dienste über einen Service eines Drittanbieters anbieten. Wir haben drei Modelle der Leistungserbringung identifiziert: (1) Generierung eines Links, um sich direkt für einen Dienst zu registrieren, (2) Ermöglichung des Kaufs von Inhalten des Diensteanbieters über eine TV-Set-Box und (3) Verkauf von Lizenzen für einige seiner Inhalte, so dass diese Inhalte innerhalb der Website oder Anwendung des Drittanbieters angeboten werden können. Keines dieser Modelle stellt eine Herausforderung für die Sicherstellung der grenzüberschreitenden Portabilität an Diensteanbieter oder Dritte dar.

### ***Was sind die möglichen Herausforderungen und Kosten im Zusammenhang mit der Anwendung der Portabilitätsverordnung?***

Die Ergebnisse der Studie zeigen, dass die Einführung der Portabilitätsverordnung die folgenden Arten von Kosten für die Dienstanbieter verursacht hat:

- **Direkte Kosten, die durch die Änderungen in der Authentifizierung der Verbraucher entstehen.** Die befragten Diensteanbieter, die nur Musik-, E-Book- und Spieledienste anbieten, boten bereits vor Inkrafttreten der Verordnung grenzüberschreitende Portabilität im gleichen Umfang an, wie es die Portabilitätsverordnung verlangt. Daher hatten sie, von einigen Ausnahmen abgesehen, keine direkten Kosten, die durch die Anwendung der Portabilitätsverordnung entstanden sind. Im audiovisuellen Bereich und im Sport ist die Situation anders. Fast 73 % der befragten Dienstleister im audiovisuellen Bereich und im Sportsektor gaben an, dass sie die Mittel zur Überprüfung des Wohnsitzmitgliedstaates installieren oder anpassen mussten. Mit einigen Ausnahmen waren die Kosten für diese Anpassungen unbedeutend.
- **Direkte Kosten, die durch die Änderungen in der technologischen Infrastruktur entstehen.** Keiner der befragten Diensteanbieter, die nur Musik, E-Books und Spieledienste anbieten, musste Investitionen in die technische Infrastruktur tätigen, um die Portabilitätsverordnung zu erfüllen. In der Zwischenzeit mussten 65 % der befragten Dienstleister aus dem audiovisuellen und Sportbereich eine neue Infrastruktur installieren, ihre bestehende Infrastruktur aktualisieren (z. B. Änderungen am Geoblocking-System vornehmen, IP-Adressen aus der EU und dem EWR auf eine Whitelist setzen) oder in zusätzliche Dienste von Dritten investieren (z. B. CDN-Anbieter bitten, den Zugriff aus allen EU- und EWR-Ländern zu ermöglichen). Die Interviewdaten deuten darauf hin, dass die Änderungen in der technologischen Infrastruktur größtenteils auf die Änderungen in der Authentifizierung der Verbraucher zurückzuführen sind.
- **Direkte Kosten, die durch die Revision von Verträgen mit Verbrauchern entstehen.** Weniger als die Hälfte der befragten Diensteanbieter haben ihre Verträge mit Verbrauchern aufgrund der Einführung der Portabilitätsverordnung überarbeitet. Die Kosten für solche Änderungen waren gering und erforderten keine umfangreichen Ressourcen.
- **Direkte Kosten, die durch die Überarbeitung von Vereinbarungen mit Rechteinhabern entstehen.** 33% der befragten Service-Provider haben marginale Anpassungen in den Verträgen

vorgenommen. Die Änderungen bestanden in der Einführung einer Klausel zur grenzüberschreitenden Portabilität. Diese Änderungen hatten keine Auswirkungen auf ihre Arbeitsbeziehungen mit den Rechteinhabern.

- **Indirekte Kosten, die sich aus der Notwendigkeit ergeben, die technische Netzwerkinfrastruktur<sup>17</sup> zu aktualisieren**, um grenzüberschreitend die gleiche Servicequalität zu gewährleisten. Da die Verordnung die Diensteanbieter nicht dazu verpflichtet, ihre technische Infrastruktur zu aktualisieren und grenzüberschreitend die gleiche Qualität zu gewährleisten, wurden keine signifikanten indirekten Kosten durch die Einführung der Portabilitätsverordnung festgestellt.

### *Wie wird die grenzüberschreitende Portabilität von den Verbrauchern tatsächlich genutzt?*

Aus den Umfragen bei den Diensteanbietern und dem Eurobarometer<sup>18</sup> geht hervor, dass etwa ein Drittel der europäischen Verbraucher die grenzüberschreitende Portabilität nutzt. Bei vielen Diensteanbietern, die von dieser Studie erfasst werden, machen diese Verbraucher jedoch nur einen kleinen Anteil ihrer Abonnenten aus (weniger als 5 % pro Diensteanbieter). Verbraucher, die die Funktion der grenzüberschreitenden Portabilität nutzen, verwenden sie in der Regel für einen kurzen Zeitraum (bis zu einer Woche oder weniger als 2-3 Wochen) und 2-5 Mal pro Jahr.

### *Welche Auswirkungen hat die Verordnung auf die Verbraucher und die Arbeitsweise der Diensteanbieter?*

Die Auswirkungen der Portabilitätsverordnung auf die Art und Weise, wie Diensteanbieter auf dem Markt agieren, unterscheiden sich je nach Branche, in der die Dienste erbracht werden. Die Portabilitätsverordnung hatte keine Auswirkungen auf die Mehrheit der befragten Diensteanbieter, die nur in den Bereichen Musik, E-Books und Spiele tätig sind, da die meisten Dienste in diesen Bereichen bereits vor Einführung der Verordnung portabel waren. Die Auswirkungen der Verordnung auf die befragten und interviewten Dienstleister im audiovisuellen Sektor und im Sportbereich waren bis auf einige Ausnahmen gering. Dienstleister in diesen Sektoren mussten Änderungen bei der Authentifizierung von Verbrauchern und der technologischen Infrastruktur vornehmen sowie Verträge mit Verbrauchern und Rechteinhabern überarbeiten. Die meisten dieser Dienstleister merkten an, dass diese Änderungen keine oder nur geringfügige technische Anpassungen erforderten, so dass es keine wesentlichen zusätzlichen Kosten oder Änderungen im täglichen Betrieb und in der Beziehung zu den Rechteinhabern gab.

Darüber hinaus haben die befragten Diensteanbieter keine signifikante Verschiebung der Nachfrage oder der Art der Nutzung ihrer Dienste erlebt, die auf die Anwendung der Portabilitätsverordnung zurückgeführt werden könnte. Die meisten der befragten Dienstleister führen die fehlende Verlagerung der Nachfrage auf die bestehenden Reisebeschränkungen, auf die allgemeine relative Neuheit der Verordnung und auf die Tatsache zurück, dass die Verordnung nur für reisende Verbraucher relevant ist. Trotz des Mangels an Beweisen äußern die befragten Diensteanbieter (vor allem im audiovisuellen und Sportbereich) die Ansicht, dass die Portabilitätsverordnung eine positive Entwicklung ist, da sie ihren Diensten ein zusätzliches Merkmal verleiht, das von ihren Kunden geschätzt wird.

### **Bewertung der Erfahrungen mit der Umsetzung der Portabilitätsverordnung durch die nationalen Verbraucherorganisationen und Behörden**

#### *Wie sind die allgemeinen Ansichten der Verbraucher über die Verordnung?*

Die befragten und interviewten Verbraucherorganisationen und nationalen Behörden konnten keine Hinweise darauf geben, wie vertraut oder zufrieden die Verbraucher mit der Portabilitätsverordnung sind. Ein Drittel der befragten Verbraucherorganisationen ist der Meinung, dass die Verordnung nicht ausreichend bekannt gemacht wurde, was auf ein mangelndes Bewusstsein der Verbraucher für die Portabilitätsverordnung hinweisen könnte.

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<sup>17</sup> Die Verordnung verpflichtet die Diensteanbieter nicht, ihre technische Infrastruktur zu aktualisieren, um grenzüberschreitend die gleiche Qualität zu gewährleisten, daher werden die Kosten, die durch die Investitionen in diese Infrastruktur entstehen, als indirekt betrachtet.

<sup>18</sup> Kantar Public (2019). Flash Eurobarometer 477a: Online-Zugriff auf Inhalte und grenzüberschreitende Portabilität von Online-Inhaltediensten. Bericht erstellt auf Anfrage der Europäischen Kommission. Online verfügbar unter: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>



### ***Welche Auswirkungen hat die Verordnung auf die Verbraucher?***

Die Portabilitätsverordnung wird von den befragten Verbraucherorganisationen allgemein als eine positive neue Entwicklung für die Verbraucher gesehen. Die Hälfte der befragten Verbraucherorganisationen ist der Meinung, dass dies einen erheblichen Einfluss auf die Verbraucher hat. Sie sind der Meinung, dass die Verordnung den digitalen Binnenmarkt stärkt und eine Rechtsgrundlage für die Gespräche der Organisationen mit Diensteanbietern aufgrund einer Beschwerde eines Verbrauchers bietet, was eine erfolgreichere Lösung von Fällen bedeutet. Darüber hinaus haben einige der befragten Verbraucherorganisationen seit Inkrafttreten der Portabilitätsverordnung einen deutlichen Rückgang der bei ihnen eingehenden Beschwerden über den Zugang zu Online-Inhaltendiensten während Reisen in anderen Mitgliedsstaaten festgestellt. Im Allgemeinen sind die Befragten der Meinung, dass die begrenzte Anzahl von Beschwerden auf eine Kombination von Gründen zurückzuführen ist, hauptsächlich auf die reibungslose Umsetzung der Verordnung und die Reisebeschränkungen in der EU aufgrund von Covid-19. Der geringe Bekanntheitsgrad der Verordnung bei den Verbrauchern mag auch einen geringen Einfluss darauf gehabt haben. 50 % der befragten Verbraucherorganisationen sind jedoch der Meinung, dass die Auswirkungen nicht signifikant sind, da der Anwendungsbereich der Verordnung auf die grenzüberschreitende Portabilität beschränkt ist und sich nicht auf den grenzüberschreitenden Zugang bezieht.

### ***Auf welche Probleme stoßen Verbraucher bei der Nutzung der Portabilität von Online-Inhaltendiensten? Wie wird mit diesen Problemen umgegangen?***

Beschwerden bezüglich der Portabilitätsverordnung waren zu Beginn der Anwendung der Portabilitätsverordnung relativ stärker ausgeprägt. Die befragten Verbraucherorganisationen vermuten, dass sich die Diensteanbieter noch in der Anfangsphase der Umsetzung der Anforderungen der Verordnung befanden, so dass die grenzüberschreitende Portabilität noch nicht in vollem Umfang verfügbar war. Derzeit hat die Mehrheit der befragten Verbraucherorganisationen berichtet, keine Beschwerden bezüglich der Portabilitätsverordnung erhalten zu haben. Ein Fünftel (8 von 40) der befragten Verbraucherorganisationen hat Beschwerden über die grenzüberschreitende Portabilität erhalten, die sich auf folgende Punkte konzentrieren: Probleme im Zusammenhang mit der Verfügbarkeit des Dienstes, Probleme im Zusammenhang mit der Nichtverfügbarkeit bestimmter Inhalte oder Funktionen des Dienstes, Probleme im Zusammenhang mit der Überprüfung des Wohnsitzmitgliedstaates.

Wenn Beschwerden wie diese eingingen, identifizierten die befragten und interviewten Organisationen das Heimatland des Dienstleisters, informierten die Verbraucher über ihre Rechte und kontaktierten den Dienstleister (oder eine andere Behörde, die in der Lage ist, den Dienstleister zu kontaktieren) zur Schlichtung. Dieser Prozess ist in der Regel ausreichend, um eine erfolgreiche Lösung solcher Fälle zu erreichen.

### ***Was sind die verfügbaren Durchsetzungsmechanismen? Welche Mittel werden zur Überwachung und Sensibilisierung für die Portabilitätsverordnung eingesetzt?***

Keine der befragten Verbraucherorganisationen musste auf zusätzliche Durchsetzungsmechanismen in Bezug auf Fragen zur Portabilitätsverordnung zurückgreifen. Es gibt jedoch die folgenden Arten von möglichen Durchsetzungs- oder Abhilfemaßnahmen:

- Die Mehrheit der befragten Verbraucherorganisationen ist Mitglied im Netzwerk der Consumer Protection Cooperation (CPC) und sieht es im Allgemeinen als einen wichtigen Mechanismus an.
- Die meisten der befragten Verbraucherorganisationen kennen alternative Streitbeilegungsstellen (ADR), die potenziell bei Problemen im Zusammenhang mit der Portabilitätsverordnung in ihren Ländern genutzt werden könnten. Die berichtete Effektivität von ADR-Stellen hängt davon ab, ob die Teilnahme an ihren Verfahren und ihre Entscheidungen obligatorisch sind.
- Einige befragte Verbraucherorganisationen berichteten auch von alternativen nationalen Durchsetzungsmechanismen (z. B. Regulierungsbehörden für Telekommunikation und audiovisuelle Mediendienste sowie Gewerbeaufsichtsämter). Ihre Verfahren oder ihre Effektivität in Bezug auf die Durchsetzung der Portabilitätsverordnung sind jedoch unklar, da keiner der Befragten sie in der Praxis verwendet hat.

Die befragten Verbraucherorganisationen und nationalen Behörden berichteten, dass sie keine Testkäufe durchgeführt haben, um zu überprüfen, ob die Diensteanbieter die Portabilitätsverordnung korrekt anwenden, oder Umfragen über die Zufriedenheit der Verbraucher mit der Funktion der grenzüberschreitenden Portabilität. Mehrere Befragte haben jedoch Sensibilisierungskampagnen bezüglich der Portabilitätsverordnung durchgeführt. Die Kampagnen bestanden aus der Veröffentlichung

von Informationen über die Portabilitätsverordnung auf den Websites von Organisationen, auf Social-Media-Seiten (z. B. Facebook) und in einigen Fällen in den Medien (z. B. im Fernsehen oder in der Presse).

## **Bewertung möglicher Auswirkungen der Anwendung der Portabilitätsverordnung auf Rechteinhaber**

### ***Wie wurde die Verordnung von den Rechteinhabern aufgenommen?***

Die Mehrheit der befragten Organisationen der Rechteinhaber hat angegeben, dass die Portabilitätsverordnung als logischer Schritt und als Verbesserung für die Verbraucher wahrgenommen wurde. Die befragten Rechteinhaber aus den Segmenten Musik, E-Books und Spiele äußerten jedoch die Ansicht, dass die Verordnung für ihre Segmente unnötig sei, da ihre Lizenzierungspraktiken die grenzüberschreitende Portabilität bereits vor dem gesetzlichen Eingriff voraussetzten.

Während die befragten Rechteinhaber der Meinung sind, dass das in der Verordnung dargestellte Ziel logisch ist, äußerten einige Befragte aus den Bereichen Sport und audiovisuelle Dienste folgende Bedenken:

- Unterschiede in der Umsetzung der Verordnung können Probleme aufwerfen. Insbesondere aufgrund des wahrgenommenen Mangels an einem gemeinsamen Verständnis wichtiger Aspekte der Verordnung, wie z. B. "vorübergehend anwesend".
- Die Bedeutung guter Überprüfungsverfahren, die in der Verordnung vorgeschlagen werden, um sicherzustellen, dass der Teilnehmer tatsächlich in einem der Mitgliedsstaaten ansässig ist und wenn er reist, dies nur vorübergehend tut.
- Die Verordnung wurde als Eingriff der EU in die Sphäre gesehen, die sich über Geschäftspraktiken und vertragliche Vereinbarungen hätte entwickeln können.

### ***Welche Auswirkungen hat die Verordnung auf die Rechteinhaber (einschließlich der Kosten)?***

Die Portabilitätsverordnung hatte keine Auswirkungen auf die Rechteinhaber in den Bereichen Musik, E-Books und Spiele, da die Dienste bereits vor Inkrafttreten der Verordnung vollständig portabel waren und die Rechteinhaber folglich nichts an ihrem Betrieb ändern mussten. Die Auswirkungen der Verordnung auf die Rechteinhaber von audiovisuellen und Sportinhalten waren marginal. Die einzige beobachtbare Art der Auswirkung war die Einführung von Änderungen in den Lizenzvereinbarungen durch ein Drittel der befragten Rechteinhaberorganisationen, die alle die Segmente Sport und audiovisuelle Online-Inhalte vertreten. Diese Änderungen brachten einige vernachlässigbare Kosten mit sich - die Zeit des Rechtsteams und die Diskussionen mit ihren Mitgliedern, Dienstleistern und anderen Interessengruppen über die Verordnung und ihre Anwendung, die einige Zeitressourcen erforderten. Insgesamt entstanden den Rechteinhabern keine nennenswerten Kosten im Zusammenhang mit der Umsetzung der Portabilitätsverordnung und sie hatte keine Auswirkungen auf ihren Betrieb.

### ***Wie sind die Erfahrungen der Rechteinhaber mit der Verordnung (einschließlich der Änderungen bei Lizenzverträgen und der Überprüfung des Wohnsitzmitgliedstaates)?***

Im Prinzip verlangt die Verordnung keine Anpassung der zwischen Rechteinhabern und Diensteanbietern geschlossenen Lizenzverträge. Im Gegenzug hat nur ein Drittel der befragten Rechteinhaber (aus den Bereichen Sport und audiovisuelle Medien) Anpassungen an ihren Lizenzverträgen vorgenommen. Sie haben in der Regel Klauseln aufgenommen, die besagen, dass die obligatorische grenzüberschreitende Portabilität nun gilt. Aufgrund der mangelnden Verhandlungsmacht und des fehlenden Bewusstseins hat keiner der befragten Rechteinhaber spezielle Mittel zur Überprüfung gefordert oder auf die Verpflichtung zur Überprüfung des Wohnsitzmitgliedstaates des Abonnenten verzichtet. Die Sportinhalte stellen eine Ausnahme dar, da die befragten Organisationen angaben, die Mittel zu diskutieren oder die Angebote zur Ausstrahlung ihrer Inhalte nur anzunehmen, wenn sie einen ähnlichen Sicherheitsstandard wie andere, zuvor erhaltene Angebote beschreiben. Die befragten Rechteinhaber kommunizieren in unterschiedlichem Maße mit den Diensteanbietern und erhalten in der Regel keine Daten zur grenzüberschreitenden Portabilität. Dies bedeutet, dass keine missbräuchliche Verwendung durch die Rechteinhaber festgestellt wurde.

## INTRODUCTION

### **Objectives and scope of the Study**

The overall objective of this study is to support the European Commission in the assessment of the application of the Portability Regulation and to provide input in view of preparation for the Commission's report. Specifically, the study aims to achieve the following:

- Gather evidence regarding the practical application of the portability rules by online content service providers.
- Assess consumer experience with the cross-border portability of online content services.
- Assess the impacts of the Portability Regulation on service providers (in particular SMEs) and rightholders (content producers and distributors).

A more detailed elaboration on the needs, challenges, planned responses and expected results of this study is presented in Table 1 below.

**Table 1. Needs, challenges, proposed responses and expected results**

Needs	Challenges	Responses	Results
<p><b>To assess the current state of the Portability Regulation application</b></p>	<ul style="list-style-type: none"> <li>• The online content provision services market is wide, thus the application of the Regulation varies across sectors and organisations.</li> <li>• Different licencing practices of analysed segments have led to different experiences with cross-border portability.</li> <li>• Some of the terms in the Regulation may lack clarity (e.g. “temporarily present”), giving rise to varying interpretations and different commercial practices.</li> </ul>	<ul style="list-style-type: none"> <li>• In-depth desk research provides a strong foundation for the assessment.</li> <li>• Thematic experts provide their insights and ensure the appropriate quality and scope of the analysis.</li> <li>• Reliance on experienced researchers for the formulation of surveys and interview questions to ensure high-quality data collection results.</li> <li>• Survey of service providers and the mystery shopping exercise provide data on the practical application of the Portability Regulation.</li> <li>• Interviews provide supplementary information on differences between segments and different interpretations of certain concepts.</li> </ul>	<ul style="list-style-type: none"> <li>• The analysis of legal, technological and market contexts in which the Regulation has been applied provide the basis for obtaining informative and comparable surveys, interviews and mystery shopping data.</li> <li>• An assessment of how service providers apply the Portability Regulation based on both the service providers’ opinion (via surveys and interviews) and objective data (via the mystery shopping exercise).</li> </ul>
<p><b>To gather evidence and assess consumers’ experience with the cross-border portability of online content</b></p>	<ul style="list-style-type: none"> <li>• Due to possible differences in application, customers may face different limitations to their access to the cross-border portability of content services.</li> <li>• As online content services are increasingly used more widely, the number of consumers is becoming extremely high.</li> <li>• Not all consumers are aware of the Regulation which may have an impact on the number of complaints.</li> <li>• Due to Covid-19, travel was restricted which affected the use of cross-border portability.</li> </ul>	<ul style="list-style-type: none"> <li>• Survey of consumer organisations’ sample, ensuring that we contacted all of the authorities of all organisations involved in the enforcement of the Regulation or it’s parts.</li> <li>• Surveying national and European-level consumer organisations and authorities to ensure a wide sample.</li> <li>• Reliance on experienced researchers for formulating the questionnaires and conducting the survey and interviews.</li> </ul>	<ul style="list-style-type: none"> <li>• Data on the type and frequency of complaints received by authorities regarding the Portability Regulation and the ways that authorities solve these complaints.</li> <li>• Data on available enforcement measures, monitoring and awareness-raising techniques.</li> <li>• Deeper insights into the consumer experiences regarding cross-border portability obtained via interviews.</li> </ul>
<p><b>To gather evidence and assess the impacts of the Portability Regulation on service providers and rightholders</b></p>	<ul style="list-style-type: none"> <li>• Lack of data on the impacts of the Regulation on service providers and rightholders.</li> <li>• Different licencing practices of analysed segments have led to different experiences with cross-border portability.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of primary data collection methods, including interviews, surveys of service providers and mystery shopping exercise.</li> <li>• Use of quantitative data gathered from desk research and surveys.</li> <li>• Fine-tuning research questions for the different groups of stakeholders.</li> <li>• Showcasing good practices through case studies on the implementation of the Regulation.</li> <li>• Interviews with rightholder organisations sample, including European-level organisations covering all analysed segments.</li> <li>• Reliance on experienced researchers for formulating the questionnaires and conducting the survey and interviews.</li> </ul>	<ul style="list-style-type: none"> <li>• Evidence on the implications of applying the Regulation on service providers and rightholders.</li> <li>• An assessment of the impacts that the Regulation had on the rightholders and issues that have arisen during the period of implementation.</li> </ul>

Source: Authors’ own elaboration.



The thematic **scope** of this study is the application and impact of the Portability Regulation on service providers, consumers, and rightholders in the EEA, where the Regulation is currently applicable. Primarily considered are the online content services provided for payment and, whenever possible, the online content services that are provided free-of-charge. This study examines the following segments of the online content services market:

- Audiovisual
- Sports
- Music
- E-books
- Game

It is important to note that the study period has been exceptional because of Covid-19. Due to restrictions enacted in light of the global pandemic, travel was restricted/reduced for almost a year which makes up half of the study period. This reduced the relative relevance of cross-border portability. Consequently, the data collected may reflect this situation.

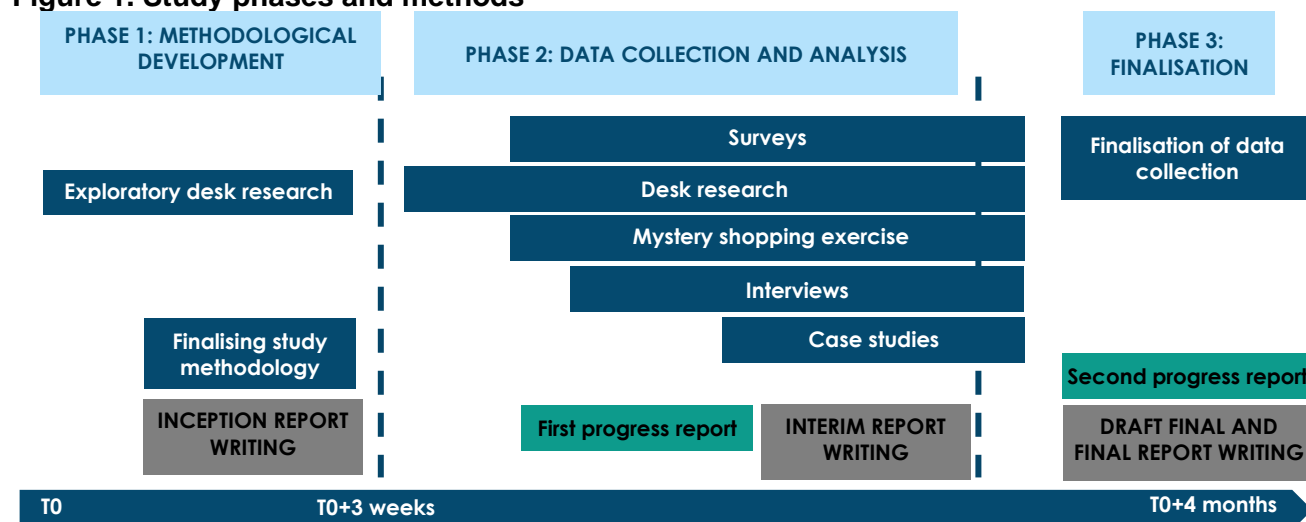
### Structure of the Final Report

- The first chapter presents a brief overview of the data collection and analysis methodology.
- The second chapter provides answers to the study questions:
  - Analysis of legal, technological and market developments
  - Application and impact of the Portability Regulation from the perspective of service providers
  - Assessment of the experience of implementation of the Portability Regulation by national consumer organisations and authorities
  - Assessment of possible impacts of the application of the Portability Regulation on rightholders
- Annexes to the report provide the following:
  - Annex 1. List of sources for the desk research
  - Annex 2. Survey implementation statistics
  - Annex 3. Detailed results of mystery shopping exercise
  - Annex 4. Overview of government electronic identity schemes and whether they are made available to the private sector, including service providers for audio-visual content
  - Annex 5. Lists of survey respondents
  - Annex 6. Lists of interviewed organisations

## 1. METHODOLOGY

This chapter briefly presents our research approach and methods used in this study. The sequence of the approach is summarised in Figure 1 below.

**Figure 1. Study phases and methods**



Source: Authors' own elaboration.

**Desk research** (including exploratory desk research during the inception phase) was mainly used to review the existing knowledge-base (incl. academic literature) on the implementation of the Portability Regulation (see Annex 1 for the list of sources reviewed). Desk research mainly focused on the recent legal, technological and market developments related to the Portability Regulation (especially relating to verification of the Member State of residence) and on complementing information on the implementation of the Regulation by service providers collected through surveys and interviews.

We implemented **two online surveys** (Annex 2 contains details about the survey implementation, while Annex 5 presents the lists of survey respondents):

- **Survey of online content service providers.** This survey was open for responses from 15 December 2020 until 26 March 2021. The aim of this survey was to collect information on how service providers apply the Portability Regulation, what challenges they face and the costs and other impacts of the Regulation. We received 62 responses representing different sectors, types, sizes and geographical coverage. Statistics about these respondents is presented in the table below. More details about the survey implementation are presented in Annex 2.
- **Survey of national and European consumer organisations and relevant national authorities.** This survey was open for responses from 21 December 2020 until 28 February 2021. The aim of this survey was to collect information on consumers' experience with the cross-border portability of online content services. We received 40 responses (30 responses from consumer organisations and 10 responses from data protection authorities). More details about the survey implementation and statistics about respondents are presented in Annex 2 and 5 respectively.

**Table 2. Service providers' survey responses breakdown**

Sector*	
Audiovisual (films/TV series) and Sports	49
Music or podcasts	19
E-books and/or Audiobooks	8
Games	4
<b>Audiovisual and sports vs only music, e-books, games</b>	
Audiovisual/sports	50
Only music, e-books and games (not providing audiovisual/sports services)	12

Audiovisual and sports segments*	
Transmission of live broadcasts	31
Catch-up TV	32
On-demand content	47
Types*	
Free of charge services	27 (11 providing only free of charge services)
Paid subscription-based services (providing services for a monthly/yearly fee)	46
Paid transactional services (users pay for each unit of content to purchase or rent on a one-time basis)	26 (3 providing only transactional services)
Global vs local service providers	
Global service providers offering services in all EU and EEA countries	22
Local service providers offering services in one or some EU and EEA countries	40 (providing services in 28 countries <sup>19</sup> )
SME vs large companies	
SME	26
Large companies	36
Approx. number of monthly users in the EU and EEA	
Up to 1 million	27
1 - 4.9 million	7
5 - 14.9 million	5
15 - 30 million	1
Over 30 million	3
I do not know/do not want to answer	15

Note: \* - Some service providers selected multiple sectors, segments and types.

Source: Authors' own elaboration.

**Mystery shopping exercise** aimed to collect data and assess how the Portability Regulation is implemented in practice from the customers' point of view. During the mystery shopping exercise, the project team tested 39 online content services<sup>20</sup>. The detailed methodology and results of the mystery shopping exercise are presented in Annex 3.

We carried out **interviews** with the following groups of stakeholders (the lists of interviewed organisations are presented in Annex 6):

- **Service providers** (38 interviews conducted). These interviews aimed to collect information for case studies and further explore the survey findings.
- **Consumer organisations and national authorities** (11 interviews conducted). Interviews aimed to collect information for case studies and further explore survey findings.
- **Entities representing rightholders** (14 interviews conducted). These interviews aimed to collect information about the impact of the Portability Regulation on rightholders.

**Table 3. Interview respondents' breakdown**

Rightholders	
Sectors	
Audiovisual (films/TV series)	8
Sports	2
Music or podcasts	1
E-books and(or) Audiobooks	1
Games	1
Overarching (covering more than one sector)	1
Consumer organisations	
EU Member States covered	10 <sup>21</sup>
EU-level organisations	1

<sup>19</sup> Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

<sup>20</sup> 34 unique service providers as 5 of them were tested for both short-term and long-term portability.

<sup>21</sup> Austria, Belgium, Bulgaria, Germany, Ireland, Italy, Lithuania, Poland, Slovenia, Spain.

Service providers	
<i>Sectors</i>	
Audiovisual	20
Sports	1
Music	6
E-books and/or Audiobooks*	1
Games	1
Overarching (representing at least two sectors)	9
<i>Types</i>	
Only free of charge services	5
Paid services	33
<i>Global vs local service providers</i>	
Global/European or providing services in more than one country	18
National	20 (providing services in 13 countries) <sup>22</sup>
<i>SME vs large companies</i>	
SME	15
Large companies	23

Note: \* - The e-books and/or audiobooks sector is represented within the overarching service providers.

Source: Authors' own elaboration.

Case studies of good practice examples aimed at providing illustrative good practice examples in addressing issues faced when implementing the Portability Regulation. The information necessary for case studies was collected while implementing other study methods. We prepared 8 such case studies. These case studies are presented in text boxes throughout the report.

<sup>22</sup> Belgium, Bulgaria, Cyprus, Denmark, France, Germany, Ireland, Italy, Latvia, Lithuania, Netherlands, Spain and the UK (regarding their experience with the Regulation until 31 December 2020)

## 2. ANALYSIS

### 2.1. Impact of recent legal, technical, and market developments on the application of the Portability Regulation

#### 2.1.1. Overview of legal developments

Since the adoption of the Portability Regulation in June of 2017, a number of legislative developments have taken place at the EU level. This section aims to provide an overview of these legislative developments and to assess their impact on the application and enforcement of the Portability Regulation. It also addresses the impact of Brexit on the Portability Regulation.

It must be noted that the developments covered in this section are very recent and some of the legislative instruments have only very recently entered into the application (an overview of this is provided in Table 4). Other legal instruments have not yet been transposed into national law, which means that there is no experience yet on the practical impact of these legal instruments on the application of the Portability Regulation.

**Table 4. List of EU legal instruments adopted or entered into force since June, 2017**

List	Date of adoption	Entry into application
<b>General Data Protection Regulation<sup>23</sup></b>	14/04/2016	25/05/2018
<b>Consumer Protection Cooperation (CPC) Regulation<sup>24</sup></b>	12/12/2017	17/01/2020
<b>Geo-Blocking Regulation<sup>25</sup></b>	28/02/2018	3/12/2018
<b>Audiovisual Media Services Directive<sup>26</sup></b>	14/11/2018	19/09/2020
<b>Digital Content Contracts Directive</b>	15/04/2019	EU MS need to transpose Directive by 1/7/2021
<b>Directive on Copyright and the Digital Single Market<sup>27</sup></b>	17/05/2019	EU MS need to transpose Directive by 7/06/2021
<b>Directive on online transmission of broadcasts<sup>28</sup></b>	17/05/2019	EU MS need to transpose Directive by 7/06/2021
<b>Directive on Collective Redress<sup>29</sup></b>	25/11/2020	EU MS need to transpose Directive by 25/12/2022 but need to apply the new measures by 25/06/2023

Source: Authors' own elaboration.

<sup>23</sup> Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data - OJ L 281, 23.11.1995, p. 31–50

<sup>24</sup> Regulation (EU) 2017/2394 of the European Parliament and of the Council of 12 December 2017 on cooperation between national authorities responsible for the enforcement of consumer protection laws and repealing Regulation (EC) No 2006/2004 - OJ L 345, 27.12.2017, p. 1–26

<sup>25</sup> Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC (Text with EEA relevance - OJ L 60I, 2.3.2018, p. 1–15)

<sup>26</sup> Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities - OJ L 303, 28.11.2018, p. 69–92

<sup>27</sup> Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC - OJ L 130, 17.5.2019, p. 92–125

<sup>28</sup> Directive (EU) 2019/789 of the European Parliament and of the Council of 17 April 2019 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes, and amending Council Directive 93/83/EEC - OJ L 130, 17.5.2019, p. 82–91

<sup>29</sup> Directive (EU) 2020/1828 of the European Parliament and of the Council of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC - OJ L 409, 4.12.2020, p. 1–27

### The General Data Protection Regulation (GDPR) and its impact on the Portability Regulation

The General Data Protection Regulation (GDPR) was adopted before the adoption of the Portability Regulation (in April 2016) but entered into application after its adoption (on 25 May 2018). The GDPR replaces the previous General Data Protection Directive 95/46/EC<sup>30</sup>. Compared to the Directive, it maintains the core principles and concepts and also strengthens certain requirements (e.g. as far as the notion of consent is concerned). Some additional rights were added such as the right to data portability which allows individuals to retrieve their personal data and transmit it to another company (controller) in a machine-readable form.

The GDPR introduces strengthened rules on consent, new obligations for data controllers and processors and, in particular, the principle of accountability. The GDPR establishes a European Data Protection Board (EDPB) that is a one-stop-shop based on a consensus finding between the lead authority (namely the data protection authority (DPA) in the Member State where the company has its main establishment along with other concerned authorities) and a consistency mechanism to guarantee a consistent application of the GDPR throughout the EU). This consistency mechanism means that before adopting a decision in a cross-border case, the data protection authority of the country of the company's main establishment must communicate the draft decision to the other concerned data protection authorities (i.e. the DPAs where the company has other establishments or where the individuals affected reside). In cases of disagreement between data protection authorities, the dispute resolution mechanism applies and the EDPB gives a binding interpretation of the legal issue at the core of the dispute between the authorities.

**The Portability Regulation refers directly to Directive 95/46/EC in a number of recitals<sup>31</sup> and articles<sup>32</sup>.** Footnote 1 of the GDPR acknowledges that Directive 95/46/EC is repealed and replaced by the GDPR with an effective date of 25 May 2018.

Just as all companies, the online content service providers covered by the Portability Regulation need to be "GDPR-compliant". **In addition, the Portability Regulation contains certain specific requirements on data protection, which are in line with the principles of the GDPR.** The need to protect personal data is particularly emphasised in Article 8 of the Portability Regulation which provides the following principles:

- In line with the **GDPR and its purpose limitation and data minimisation principles of Article 5. 1. (b) and (c), the processing of personal data carried out within the Portability Regulation** framework including, in particular, for the purposes of verification of the subscriber's Member State of residence under Article 5, shall be carried out in compliance with the GDPR and 2002/58/EC. In particular, the use of the means of verification in accordance with Article 5 and any processing of personal data under this Regulation, shall be limited to what is necessary and proportionate in order to achieve its purpose.
- **More specifically than in the GDPR, personal data collected pursuant to the Portability Regulation Article 5 shall be used solely for the purpose of verifying the subscriber's Member State of residence.** They shall not be communicated, transferred, shared, licensed, or otherwise transmitted or disclosed to holders of copyright or related rights or to those holding any other rights in the content of online content services, or to any other third parties. This requirement is more specific than the GDPR as it explicitly forbids the sharing of the data collected to verify a subscriber's place of residence.
- **Data collected pursuant to Article 5 shall not be stored by the provider of an online content service longer than necessary to complete a verification** of a subscriber's Member State of residence pursuant to Article 5(1) or (2). On completion of each verification, the data shall be immediately and irreversibly destroyed.

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<sup>30</sup> Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data - OJ L 281, 23.11.1995, p. 31–50.

<sup>31</sup> Recital 28 and 30.

<sup>32</sup> Article 8.



## The Consumer Protection Cooperation (CPC) Regulation and its impact on the Portability Regulation

**One of the main legislative developments since the adoption of the Portability Regulation is the adoption of the new CPC Regulation.** This Regulation is applicable across the EU since 17 January 2020 and its scope covers all key EU consumer laws, including the Portability Regulation (27 EU legal acts in total). Apart from cross-border portability<sup>33</sup>, it covers such areas as unfair commercial practices, e-commerce, geo-blocking, package travel, online selling, passenger rights and others.

Like the previous repealed Regulation (EC) No 2006/2004, the CPC Regulation establishes a cooperation framework between national enforcement authorities from all European Economic Area (EEA) countries for addressing breaches of consumer rules when the trader and the consumer are established in different countries or in case of widespread infringements. In comparison to the previous Regulation, nevertheless, the CPC Regulation equips national consumer protection authorities with minimum investigation and enforcement power and cooperation possibilities, so that they may more effectively fight pan-EU infringements of consumer law thereby enhancing the protection of the consumers' economic interests.<sup>34</sup> As part of this new set of minimum powers, national authorities can now request information from domain registrars and banks to find out the identity of rogue traders. As a last resort, authorities can order websites or social media accounts containing scams to be corrected or removed; they can also carry out inspections. National authorities can also decide to carry out mystery shopping to check whether service providers in their scope are correctly applying the Portability Regulation. Based on desk research and interviews with consumer organisations conducted for this study, this has not been carried out since the Portability Regulation entered into application.

Finally, the European Commission has a bigger role now: it can alert national authorities about suspected infringements, trigger a coordinated action of national authorities and coordinate their actions to tackle these issues more effectively.<sup>35</sup>

**The CPC Regulation could contribute towards addressing some of the shortcomings of the Portability Regulation, which does not include any specific provisions on the enforcement structure.** It must nevertheless be emphasised that the CPC Regulation will only come into play when there is a cross-border dimension or where the infringement is widespread.<sup>36</sup>

The cooperation mechanism set up under the CPC Regulation only applies "to intra-Union infringements, widespread infringements and widespread infringements with a Union dimension..."<sup>37</sup>:

- 'Intra-Union infringements' are acts or omissions contrary to Union laws that protect consumers' interests that have done, do or are likely to do harm to the **collective interests of consumers residing in a Member State other than the Member State in which:**
  - a) The act or omission originated or took place
  - b) The trader responsible for the act or omission is established or
  - c) Evidence or assets of the trader pertaining to the act or omission are to be found
- 'Widespread infringements' mean:

<sup>33</sup> Which is explicitly mentioned at point 26 of the Annex.

<sup>34</sup> De Streef, A & Sibony, A-L. (2017). Towards Smarter Consumer Protection Rules for Digital Services. 28th European Regional Conference of the International Telecommunications Society (ITS): "Competition and Regulation in the Information Age", Passau, Germany, 30th July - 2nd August 2017, International Telecommunications Society (ITS), Calgary. Available online at: <https://www.econstor.eu/bitstream/10419/169509/1/de-Streef-Sibony.pdf>

<sup>35</sup> Regulation (EU) 2017/2394.

<sup>36</sup> European Commission (n.d.). How are consumer rights enforced in the EU? DG Communication. Available online at: [https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/consumer-protection-cooperation-network\\_en](https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/consumer-protection-cooperation-network_en).

<sup>37</sup> Article 2.1 of the CPC Regulation

- a) any act or omission contrary to Union laws that protect consumers' interests that has done, does or is likely to do harm to the **collective interests of consumers residing in at least two Member States other than the Member State in which:**
  - a) The act or omission originated or took place
  - b) The trader responsible for the act or omission is established or
  - c) Evidence or assets of the trader pertaining to the act or omission are to be found or
- b) any acts or omissions contrary to Union laws that protect consumers interests that have done, do or are likely to do harm to the **collective interests of consumers and that have common features, including the same unlawful practice, the same interest being infringed and that are occurring concurrently, committed by the same trader, in at least three Member States**
- “Widespread infringements with a Union dimension” mean:
  - a) “a widespread infringement that has done, does or is likely to do harm to the collective interests of consumers in at least two-thirds of the Member States, accounting, together, for at least two-thirds of the population of the Union”

Based on the desk research and interviews with consumer organisations conducted for this study, thus far there has been no experience on the application of the CPC regulation in relation to portability.

**For purely national service providers it is unlikely that the CPC Regulation will be triggered for “intra-Union infringements” linked to the Portability Regulation because of the geographical conditions that need to be fulfilled.** Intra-Union infringements require harm to be done to a consumer that resides in a Member State other than the Member State where the breach originated/took place, or requires the service provider to be established in another Member State than where the consumer is resident, or assets/evidence linked to the breach to be found in another Member State than where the consumer resides. **For service providers that operate on a cross-border basis, this ground could be used if these geographical conditions are met,** e.g. if services are established in a Member State other than the Member State of residence of the consumer.

The second potential ground to trigger the application of the CPC Regulation is a “widespread infringement” which is only triggered when harm is done to the collective interests of consumers that reside in at least two<sup>38</sup> (or three) different Member States. **The CPC will therefore only be used to correct widespread infringements carried out by pan-European service providers who have subscribers in at least two Member States other than the one where they are established.**

The third ground which is “widespread infringements with a Union dimension” **could only be used** for very large platforms when there is harm to the collective interests of **consumers in at least two-thirds of the Member States, accounting, together, for at least two-thirds of the population of the Union”.**

**When national authorities have a reasonable suspicion of a widespread infringement, they may launch a so-called “coordinated action”** with one authority (or the European Commission if the authorities cannot agree) taking on the role of a coordinator. Single liaison offices in the member states and the European Commission are informed of the launch of the coordinated action. Competent authorities agree on a “common position” that the coordinator communicates to the trader responsible for the infringement. A novel feature is that consumer protection authorities can agree with traders on commitments to put an end to the infringement. Remedies could include, for instance, a reimbursement of the subscription cost or a price reduction. In case commitments were

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<sup>38</sup> Other than the Member State where the service provider is established, where the breach originated/took place or where evidence/assets were found.



not agreed upon or respected, each concerned national authority must enforce the common position domestically, nevertheless in a coordinated manner, in accordance with national legislation, which also sets forth different fines.<sup>39</sup>

Another **indirect benefit of the application of the CPC Regulation to cross-border portability lies in the role that can be played by the actors involved in the CPC Regulation.**<sup>40</sup> In particular, Single Liaison offices which are the public authorities in the Member States set up to coordinate investigations and enforcement activities may also contribute towards raising awareness of the cross-border portability right granted to EU subscribers.

It has been highlighted in the course of this study that 70% of surveyed consumer organisations generally consider this network to be an important mechanism for enforcing consumers' rights to cross-border portability. While none of the surveyed or interviewed consumer organisations had to take action regarding the Portability Regulation, they believe it is important to have the CPC Network in case of a collective breach<sup>41</sup>.

### The Geo-blocking Regulation and its impact on the Portability Regulation

On 22 March 2018, the Geo-blocking Regulation came into force in all EU Member States and has been in application since 3 December 2018. It prohibits online traders from discriminating between customers within the EU based on their country of residence or nationality.

**Audiovisual services are completely excluded from the scope of the Geo-blocking Regulation<sup>42</sup>, while online services providing access to other types of copyright-protected content (e.g. music streaming, e-books, software) are only partially covered since “the Regulation does not affect rules applicable in the field of copyright and neighbouring rights.”<sup>43</sup>**

The prohibition to apply different general conditions of access to goods and services (Article 4) does not apply to such services. The Geo-blocking Regulation is therefore applicable in these three situations i.e. sale of goods without physical delivery (e.g. when the customer collects it at the trader's premises or organises the delivery themselves); electronically supplied services whose main feature is not the provision of access to and use of copyright protected works or other protected subject matter, including the selling of copyright protected works or protected subject matter in an intangible form (e.g. cloud services, data warehousing, website hosting) and services provided in a specific physical location (e.g. concert tickets, accommodation or car rental).

Since the prohibition to apply different general conditions of access to goods and services does not apply to the content covered by the Portability Regulation, **the Geo-blocking Regulation has no direct effect on the Portability Regulation.** But it is precisely **because it does not apply that the Portability Regulation is needed as a mechanism to enable subscribers to benefit fully from their subscription** when temporarily present in a Member State other than their Member State of residence.

The review clause of the Geo-blocking Regulation provides for the European Commission to evaluate and report on the possible extension of the scope of the Regulation, including to audiovisual

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<sup>39</sup> The list of coordinated actions undertaken to date are contained on the Commission's website:

[https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/coordinated-actions\\_en](https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/coordinated-actions_en)

<sup>40</sup> See Commission website: [https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/consumer-protection-cooperation-network\\_en](https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/consumer-protection-cooperation-network_en)

<sup>41</sup> It must be noted that consumer organisations are not per se members of the CPC Network, but pursuant to Article 27 of the CPC Regulation, they have the power to issue an alert to the competent authorities of the relevant Member States and the Commission of suspected infringements covered by the Regulation and to provide information available to them set out in Article 26(3) ('external alert').

<sup>42</sup> Article 1(3) of the Geo-blocking Regulation which refers to Article 2.2 of the Services Directive (2006/29/EC). Recital

<sup>43</sup> Article 1(5) of the Geo-blocking Regulation.

and other copyright-related services. The report was published on 30 November 2020 and concluded that it **was too early to propose an extension of the scope of the regulation**.<sup>44</sup>

In the report, the Commission notes that further assessment and consideration are needed: “the analysis shows that geo-blocking in these sectors is driven by different factors and market dynamics, and that extension of the Regulation might possibly have different effects in different areas. Any beneficial effects, in particular for consumers, largely depend on copyright-licensing practices and approaches, which deserve further analysis. This is particularly the case for the audiovisual sector, where there may indeed be potentially relevant improvements in terms of availability of content”.

The European Commission adopted an Action Plan to support the recovery and transformation of Europe’s media in the digital decade on 3 December 2020.<sup>45</sup> This document announces – as a follow-up to the review of the Geo-blocking Regulation – that the European Commission intends to launch a dialogue with the audiovisual sector to try to improve access to and availability of online audiovisual content across borders. Furthermore, the Commission will monitor progress in the achievements of the specific targets in cooperation with the audiovisual sector and decide on any follow-up, assessing various options, including legislative intervention.

### **Audiovisual Media Services Directive (AVMSD) and its impact on the Portability Regulation**

The revised Audiovisual Media Services Directive (AVMSD) was adopted on 14 November 2018 and the deadline for the transposition was 19 September 2020.<sup>46</sup> This directive amends the previous Directive 2010/13/EC.

It contains a revised set of rules for providers of linear and on-demand audiovisual media services (i.e. television channels and on-demand/catch-up services, which have editorial responsibility). It also contains new rules for video-sharing platforms. One of the objectives of the new directive was to achieve a fairer regulatory framework by creating a level playing field between, on the one hand, TV broadcasters and on-demand services and on the other hand, between media service providers and video sharing platforms. For instance, the revised AVMSD introduces a clear obligation for video-on-demand service providers to promote European works. These providers need to secure at least a 30% share of European works in their catalogues and to ensure the prominence of those works (Article 13).

**The impact of the AVMSD on the Portability Regulation is likely to be marginal and indirect.** In particular, the Directive contains a new requirement on accessibility (Article 7), whereby providers of audiovisual media services need to make their services continuously and progressively more accessible without undue delay. A first report should be sent to the Commission by Member States by 19 December 2022. This revised rule implies that **audiovisual media service providers will increasingly provide accessibility features such as** sign language, subtitling for the deaf and hard of hearing, spoken subtitles, and audio descriptions. **In view of Article 3 (1) of the Portability Regulation, these elements will presumably also need to be ‘ported’** with the online content when provided by a paid online content service provider once the subscriber is temporarily present in another Member State.<sup>47</sup>

### **Digital Content Contracts Directive (DCD) and its impact on the Portability Regulation**

The Directive on certain aspects concerning contracts for the supply of digital content and digital services (Digital Content Contracts Directive – DCD) came into force on 20 May 2019. Since the

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<sup>44</sup> <https://ec.europa.eu/digital-single-market/en/news/commission-publishes-its-short-term-review-geo-blocking-regulation>

<sup>45</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0784>

<sup>46</sup> Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities OJ L 303, 28.11.2018, p. 69–92.

<sup>47</sup> This article specifies that the subscriber who is temporarily present in another Member State should be able to access and use the online content service in the same manner as in the Member State of residence, including with the same range of functionalities.

Directive only needs to be transposed at the national level by 1 July 2021 and the rules will not apply before 01 January 2022, the true impact of the Directive on the Portability Regulation is not yet known. The DCD fully harmonises certain aspects of the business to consumer contracts for the supply of digital content and services.

The directive applies to business-to-consumer (B2C) contracts in exchange for a price or in exchange for personal data, except when such data is exclusively processed by the trader to supply the service; or when it is required by the trader to comply with a legal obligation. The directive covers contracts for the supply of digital content and digital services, such as, inter alia, computer programmes, applications, video files, audio files, music files, digital games, e-books or other e-publications, and also digital services which allow for the creation of, processing of, accessing or storage of data in digital form, including software-as-a-service, such as video and audio sharing and other file hosting, word processing or games offered in the cloud computing environment and social media.

The directive harmonises certain requirements concerning contracts between traders and consumers for the supply of digital content or a digital service, such as rules on the conformity of digital content or a digital service with the contract, remedies in the event of a lack of such conformity or a failure to supply and the modalities for the exercise of those remedies, as well as on the modification of digital content or a digital service. The consumer could be discouraged from exercising remedies for a lack of conformity of digital content or a digital service if the consumer is deprived of access to content other than personal data, which the consumer provided or created through the use of the digital content or digital service. In order to ensure that the consumer benefits from effective protection in relation to the right to terminate the contract, the DCD obliges the trader to make such content available to the consumer, at the request of the consumer, following the termination of the contract.<sup>48</sup>

**The paid-for services covered by the Portability Regulation are clearly within the scope of the application of the DCD. The free-of-charge services that decide to opt-in to the Portability Regulation may also be covered** “to the extent that personal data is processed by the service provider, except when such data is exclusively processed by the trader to supply the service; or required for the trader to comply with a legal obligation”. If the service provider only processes the personal data that is needed to verify the place of residence as required under the Portability Regulation, the DCD would not be applicable. The extent to which free services will be covered will therefore need to be assessed on a case-by-case basis.

Applied to the Portability Regulation, **the main relevant benefit is likely to be the remedy given to consumers in case of a lack of conformity of the content/service compared to the contract and other subjective and objective elements not covered in the contract.**<sup>49</sup> The DCD obligates the supplier to supply digital content or a digital service that meets the criteria which have been agreed upon with the consumer (subjective conformity) and that meets the objective requirements for conformity. These include that the digital content or digital service is fit for the purposes for which digital content or digital services of the same type would normally be used, taking into account, where applicable, any existing Union and national law, technical standards or, in the absence of such technical standards, applicable sector-specific industry codes of conduct<sup>50</sup> and that it possesses the performance features which are normal for digital content or digital services of the same type and which the consumer may reasonably expect<sup>51</sup>. Portability is an element that may be normally foreseen in contracts with consumers and could, therefore, be part of the subjective conformity. Portability requirements that are regulated by law, including those foreseen by the Portability Regulation, are part of the objective conformity. If cross-border portability is not expressly addressed in the contract (or in the general conditions governing the contract) it could therefore be

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<sup>48</sup> Article 16(4) DCD.

<sup>49</sup> Directive (EU) 2019/770.

<sup>50</sup> Article 8 (1) lit. a DCD.

<sup>51</sup> Article 8 (1) lit. b DCD.

part of the performance features which are normal in digital content/services of the same type and which the consumer can reasonably expect i.e. one of the objective requirements of conformity.<sup>52</sup>

In cases of a lack of conformity, the directive **foresees a hierarchy of remedies**.<sup>53</sup> As a first solution, the consumer can ask the supplier to bring the digital content/service into conformity (i.e. to provide cross-border portability). If bringing the digital content/service into conformity is not possible - or too burdensome - the consumer has the right to a reduction of the price or to contract termination.

In cases of contract termination, the trader must reimburse the consumer all sums paid (if the digital content/service was in conformity for some of the time, the amount reimbursed should be proportionate to the period of lack of conformity). The reimbursement must be done without undue delay and in any case within 14 days and the trader must use the same payment means that the consumer used.<sup>54</sup>

In terms of enforcement, the DCD leaves the Member States free to decide which bodies can take action to enforce the Directive: public bodies, consumer organisations and/or professional organisations. Member States could also decide to entrust this power to more than one body. It is also up to the Member States to set the measures, including fines, applicable to infringements on the directive.

### Directive on Copyright in the Digital Single Market (DSM) and its impact on the Portability Regulation

Directive (EU) 2019/790 of the European Parliament and the Council on Copyright in the Digital Single Market (DSM) was adopted with the stated objectives of adapting exceptions to the digital and cross-border environment, of ensuring wider access to content, and of achieving a well-functioning marketplace for copyright.<sup>55</sup> **Although the Directive introduces important new additions to the European Union's legislative framework, it is not yet apparent how these new rules could have an effect on the Portability Regulation.**

### Directive on online transmission of broadcasts and its impact on the Portability Regulation

The Directive laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes, and amending Council Directive 93/83/EEC was adopted with the view of facilitating cross-border access to radio and television programmes.

The directive provides that the relevant copyright acts that occur when broadcasters provide public radio programmes and certain TV programmes in "*ancillary online services*" are deemed to occur in the country where the broadcaster is established. This legal fiction allows the broadcaster to clear the rights to all of the protected works and subject matter included in these programmes (e.g. phonograms or performances) only in the Member State where it is established, irrespective of the fact that these services are received in other Member States. The territoriality of copyright would otherwise require the clearing of rights in each country.

The country-of-origin principle applies **to radio programmes, to TV news and current affairs and to TV programmes that are fully financed by the broadcaster** (i.e. excluding sporting event broadcasts and programmes that are co-produced or commissioned to independent producers) when they are provided in a broadcaster's "*ancillary online service*". These are online services provided by the broadcaster or "*under its control and responsibility*":

- Simultaneously with the broadcast (i.e. simulcast) or
- For a defined period of time after the broadcast (i.e. catch-up services) or

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<sup>52</sup> Article 8.1 of DCD

<sup>53</sup> Article 14 of DCD

<sup>54</sup> Article 16 of DCD

<sup>55</sup> Recital 3 of Directive on Copyright and the DSM.

- To give access to material that “*enriches or expands*” programmes, including by “*previewing, extending, supplementing or reviewing*” the content

However, the directive highlights the contractual freedom of the rightholders and broadcasting organisations who are free to agree to limit the exploitation of the rights affected by the country-of-origin principle, provided that this is in compliance with Union law.

The directive also extends mandatory collective rights management, which currently applies only to cross-border retransmission of broadcasts over cable networks, to retransmission over other closed networks (e.g. closed-circuit IPTV, satellite, DTT, and mobile) and over the open internet if the retransmission occurs in a managed environment (i.e. access is granted only to authorised users with a level of security comparable to encryption, a recital explains).

The deadline for Member States to transpose the Directive on the online transmission of broadcasts into national laws expired on 7 June 2021. The directive will ease the clearance of copyright for online transmission of certain types of content (i.e. radio programmes, TV news, and current affairs and TV programmes that are fully financed by the broadcaster) and for certain uses only (i.e. broadcasters’ “*ancillary online services*”). **It will therefore make it easier for broadcasters to make their programmes available online in other territories.**

Broadcasters providing free online content services could therefore rely on these new rules to make certain that their programmes are available across borders, instead of opting in to apply the Portability Regulation (under which they need to verify the Member State of residence of their users). However, it is important to note that the country-of-origin principle only applies to certain types of TV programmes. By contrast, an application of the Portability Regulation would allow broadcasters to make sure that their users continue accessing all of their programmes when they travel across the EU.

### Directive on Collective Redress and its impact on the Portability Regulation

The Directive on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC (Directive on Collective Redress) replaces another directive on injunctions but which did not cover redress (i.e. compensation and repair) measures.<sup>56</sup> This directive was adopted on 25 November 2020 and needs to be implemented by 25 June 2023.

The directive puts in place a procedural mechanism to allow so-called qualified entities to bring representative actions before national courts or administrative authorities on behalf of consumers where the infringer harms the collective interest of consumers. The collective interest of a consumer refers to the general interest of consumers and, in particular, for purposes of redress measures, the interests of a group of consumers.

Qualified entities can be any organisation (such as a consumer protection organisation) or a public body that represents the interests of consumers. These will need to be designated by the Member States. The directive sets out criteria to designate qualified entities that can bring cross-border collective actions. For domestic actions, the member states can designate their criteria themselves. These qualified entities can bring injunctions (i.e. an order for a trader to stop an infringement) and redress measures such as a price reduction, contract termination or reimbursement. Individual consumers would not bear the costs of the proceedings, except if they deliberately/negligently caused the proceedings.

The directive contains an annex listing the infringements that may be covered by the collective redress mechanism. Among the 66 pieces of legislation listed, Point 59 mentions the Portability Regulation. This means that **any infringement of the Regulation that would damage the collective interests of consumers could be remedied by collective redress** once the directive

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<sup>56</sup> OJ L 409, 4.12.2020, p. 1–27



comes into force in the Member States. **This will certainly have a positive effect on the level of enforcement of the Regulation.**

### **Brexit and its impact on the Portability Regulation**

The United Kingdom (UK) ceased to be a Member State of the European Union on 31 January 2020. An 11-month transition period ended on 31 December 2020. During this transition period, the UK remained within the single market and continued to be subject to EU rules and hence to the Portability Regulation. At the end of the transition period, the UK's relationship with the EU is framed in part by the trade deal that was reached between the UK and the EU on 24 December 2020, but the agreement does not cover the Portability Regulation.<sup>57</sup> As a result, the UK is a third country for the purpose of the Portability Regulation.

**Subscribers based in the EU/EEA will no longer be able to benefit from cross-border portability in the UK, and service providers will need to adapt accordingly both from a technical and legal point of view.** They will need to disable portability for consumers who travel to the UK. Alternatively, service providers would need to seek permission from all rightholders for the content offered in their catalogues and could continue to offer cross-border portability of services to their subscribers when they travel to the UK. The UK Government has published guidance confirming that like with all regulations, the Portability Regulation no longer applies to UK-EEA travel from 1 January 2021.<sup>58</sup>

However, even if cross-border portability is provided on a voluntary basis, another issue is that the Roaming Regulation also ceased to apply and free-roaming is not guaranteed from 1 January 2021.<sup>59</sup> This means that when consumers make use of their content service while using their mobile connection in the UK, they could face unexpected charges. The UK has on its side adopted legislation, the Mobile Roaming (EU Exit) Regulations 2019, to protect UK customers from unexpected charges when they travel to the EU Member States.<sup>60</sup>

#### **2.1.2. Overview of technological developments**

The most important technological challenges related to the application of the Portability Regulation may be summarised in the following two issues:

- 1. The first is determining the Member State of residence of a subscriber.** The current Regulation lists several ways in which a service provider can determine the Member State of residence of a subscriber. Technological and market developments render some of these obsolete and emphasise the importance of others. Identification methods used by large global players such as Google and Facebook are solving these challenges, but introduce challenges in terms of privacy. Also, the implementation of electronic identification, authentication and trust services and the emergence of Identity Networks based on government eIDs in some Member States such as Denmark, are providing a means of determining the Member State of residence of a subscriber. The eIDAS Regulation (910/2014) adopted in 2014 defined requirements that enable mutual recognition of electronic identification schemes across Member States (see Box 1 below for details).

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<sup>57</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2020.444.01.0014.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2020.444.01.0014.01.ENG)

<sup>58</sup> UK government guidance on Cross-Border Portability of online content services, published 30 January 2021, available at <https://www.gov.uk/guidance/cross-border-portability-of-online-content-services> (consulted 26/02/2021). The guidance specifies that as a consequence, online content service providers will not be required to provide content ordinarily available in the UK to a UK customer who is temporarily present in any other Member State. The guidance specifies that this will not prevent service providers offering cross-border portability to their customers on a voluntary basis, but to do so they will need the permission of the owners of the content they provide.

<sup>59</sup> <https://www.gov.uk/guidance/using-your-mobile-in-eu-and-eea-countries-after-the-uk-leaves-the-eu>

<sup>60</sup> <https://www.legislation.gov.uk/uksi/2019/587/regulation/1/made>. Accordingly, UK subscribers will not be able to continue to use mobile data services when roaming unless they actively chose to continue to use their mobile data services. The government has also legislated to continue to ensure that consumers receive alerts when they are at 80% and 100% data usage.

2. **The second is delivering reasonable quality of service in a new geography.** The technological evolution of Content Delivery Networks (CDN) is helping to solve the challenge of providing a good quality of service in other geographies. This is reinforced by the proliferation of devices for consumption including mobile devices, which challenge the design of CDNs. The Portability Regulation has the potential to have an indirect impact on the evolution of online content delivery technology. The choice of technology used to deliver online content has an impact on the quality of services.<sup>61</sup> Even if the Portability Regulation does not demand that content providers ensure the same quality across borders (Article 3(3) of the Regulation), service providers might want to review their content delivery options to ensure the same quality of services across Europe.<sup>62</sup> However, currently there is insufficient evidence to support this trend (see more details in Chapter 2.2.7).

#### Determining the Member State of residence of a subscriber

Determining with reasonable certainty the Member State of residence of a subscriber is a critical measure for the correct application of the Portability Regulation. The Portability Regulation lists 11 means of verification of a Member State of residence that are available to service providers. This section presents the current state of play of verification means used and innovations related to verification.

#### Box 1. The eIDAS Regulation

The eIDAS Regulation adopted in 2014 aims to provide a framework empowering citizens and business to access cross-border public services. It defines requirements enabling the mutual recognition of electronic identification schemes and establishes an interoperability framework based on eIDAS nodes. The regulation:

- ensures that people and businesses can use their own national electronic identification schemes (eIDs) to seamlessly access online public services in other EU countries
- creates a European internal market for trust services by ensuring that they are recognized across borders and have the same legal status as their traditional paper-based equivalents

The eIDAS Regulation is technologically neutral and offers full flexibility to the Member States in terms of the design and technical choice used for implementation, which means that the scope of use and technologies used for implementation differs. For instance, some implementations rely on physical cards (electronic identity cards) while others are purely digital (mobile apps).

The eIDAS Regulation is of particular interest to the Portability Regulation as it opens up the possibility for private parties to use electronic identification for identifying users of digital services.

The eIDAS Regulation is under implementation in the Member States. Currently, the government eID is available for use by private parties in 17 Member States and planned in an additional four. Annex 4 shows the state of play of the implementation of eIDAS in different Member States.

Source: Authors' own elaboration based on the eIDAS Regulation.

<sup>61</sup> Wang, M., Jayaraman, P. P., Rajan, R., Mitra, K., Zhang, M., Li, E., Khan, S., Pathan, M. & Georgeakopoulos, D. (2015). An Overview of Cloud Based Content Delivery Networks: Research Dimensions and State-of-the-Art. In Hameurlain, A., & Küng, J., Wagner, R., & Sakr, S., (Eds.). Transactions on Large-Scale Data- and Knowledge-Centred Systems XX: Special Issue on Advanced Techniques for Big Data Management. 10.1007/978-3-662-46703-9. Available online at: [https://www.researchgate.net/publication/286221526\\_An\\_Overview\\_of\\_Cloud\\_Based\\_Content\\_Delivery\\_Networks\\_Research\\_Dimensions\\_and\\_State-of-the-Art](https://www.researchgate.net/publication/286221526_An_Overview_of_Cloud_Based_Content_Delivery_Networks_Research_Dimensions_and_State-of-the-Art)

<sup>62</sup> European Commission (2015). Impact assessment: Proposal for a Regulation of the European Parliament and of the Council to ensure the cross-border portability of online content services in the internal market. COM(2015) 627 final, SWD(2015) 271 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2015%3A0270%3AFIN>

**State of play based on a survey of service providers**

The most common means of determining the Member State of residence for a subscriber is by undertaking an IP check or through payment information. More details about the use of verification means and the reasons behind the popularity of the means are presented in Chapter 2.2.1.

In this section, we present more details about technological developments concerning each means of determining the subscriber's Member State of residence.

**IP check:**

<b>Legal reference:</b>	(k) an internet protocol (IP) address check, to identify the Member State where the subscriber accesses the online content service
<b>Frequency of use:</b>	62% of respondents (32/52)
<b>Evaluation of 2021 status:</b>	<ul style="list-style-type: none"> <li>IP address check is the most commonly used means of determining the Member State of residence for a service provider. It is usually used in combination with other verification means.</li> <li>The methods of IP checking are the same as when the Portability Regulation was being adopted with a few new developments. IP address check services have emerged that use various techniques which can provide protection against fraud. However, the location of the subscriber may still be obfuscated by the use of Virtual Private Networks (VPN) (See Box 4 below for a more comprehensive account of this). In essence, IP address checks cannot be used as the sole means of determining the Member State of residence, but they do provide a simple means of supporting verification as the location (IP address) of the user is also used for the serving of e.g. streaming content to ensure that the subscriber is served from a server as close to the subscriber as possible in the network (in terms of number of network hops).</li> </ul>

**Identity Cards:**

<b>Legal reference<sup>63</sup>:</b>	(a) an identity card, electronic means of identification, in particular those falling under the electronic identification schemes notified in accordance with Regulation (EU) No. 910/2014 of the European Parliament and of the Council (1), or any other valid identity document confirming the subscriber's Member State of residence
<b>Frequency of use:</b>	17% of respondents (9/52)
<b>Evaluation of 2021 status:</b>	<ul style="list-style-type: none"> <li>eIDAS is being adopted and allows verification of the identity and Member State of residence of a consumer in an increasing number of Member States.</li> <li>The technology is there, and it is mature. The adoption of eID solutions in Member States is not complete and some Member States have solutions that make them less attractive or unavailable for digital content service providers (see Annex 4 for details).</li> <li>The data gathering has found two examples of service providers using eID at the time of sign-up (see more details about this example in Box 2).</li> <li>Digital ID solutions based on blockchains as well as more centralized architectures are becoming available and require more detailed scrutiny. In essence, the available means of verifying the Member State of residence through digital identity documents are expanding.</li> </ul>

**Payment Details:**

<b>Legal reference:</b>	(b) payment details such as the bank account or credit or debit card number of the subscriber
<b>Frequency of use:</b>	54% of respondents (28/52)
<b>Evaluation of 2021 status:</b>	No substantial innovations. Status quo since 2018. In some countries, payment is made by making use of an eID two-factor authentication (e.g. Denmark).

**Set-top box:**

<b>Legal reference:</b>	(c) the place of installation of a set-top box, a decoder or a similar device used to supply services to the subscriber
<b>Frequency of use:</b>	25% of respondents (13/52)

<sup>63</sup> Regulation (EU) 2017/1128 Article 5.

<b>Evaluation of 2021 status:</b>	This means of verification is of interest to telecom service providers that have a physical installation with the consumer. This model of delivery of audiovisual media services is still widely used but is decreasing. For content providers delivering through telecom service providers, this is an option but creates a lock-in with the provider of the set-top box.
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**Other services:**

<b>Legal reference:</b>	(d) a payment by the subscriber for a licence fee for other services provided in the Member State, such as public service broadcasting
<b>Frequency of use:</b>	4% of respondents (2/52)
<b>Evaluation of 2021 status:</b>	This means of verification is relevant for service providers where e.g. other services are tied to a residential address. One service provider in the sample uses this as the sole means of verification.

**Teleconnection:**

<b>Legal reference:</b>	(e) an internet or telephone service supply contract or any similar type of contract linking the subscriber to the Member State
<b>Frequency of use:</b>	21% of respondents (1/52)
<b>Evaluation of 2021 status:</b>	This means of verification is of interest to telecom service providers that have a physical installation. This is relevant for bundling audiovisual media services with the telephone/internet.

**Electoral rolls:**

<b>Legal reference:</b>	(f) registration on local electoral rolls, if the information concerned is publicly available
<b>Frequency of use:</b>	None found in sample.
<b>Evaluation of 2021 status:</b>	No usage

**Tax payments:**

<b>Legal reference:</b>	(g) payment of local taxes, if the information concerned is publicly available
<b>Frequency of use:</b>	None found in sample.
<b>Evaluation of 2021 status:</b>	No usage

**Utility bill:**

<b>Legal reference:</b>	(h) a utility bill of the subscriber linking the subscriber to the Member State
<b>Frequency of use:</b>	6% of respondents (3/52)
<b>Evaluation of 2021 status:</b>	This method is used by a few service providers and no noteworthy technical developments have taken place that emphasize the importance of this.

**Postal address:**

<b>Legal reference:</b>	(i) the billing address or the postal address of the subscriber
<b>Frequency of use:</b>	31% of respondents (16/52)
<b>Evaluation of 2021 status:</b>	This is a commonly used means of checking the location of the user. It is always used in combination with other means of verification.

**User declaration:**

<b>Legal reference:</b>	(j) a declaration by the subscriber confirming the subscriber's address in the Member State
<b>Frequency of use:</b>	19% of respondents (10/52)
<b>Evaluation of 2021 status:</b>	This is a commonly used means of checking the location of the user. It is always used in combination with other means of verification.

**State of play based on a survey of service providers: summary evaluation**

In general, **the national government eID solutions offer the most trustworthy solution for verifying the Member State of residence, and the eIDAS regulation<sup>64</sup> offers the legislative environment for supporting the adoption of this.** The eIDAS regulation commits all Member States to introducing an electronic means of identification to its citizens and to accept credentials from citizens of other Member States. For example, a citizen of one Member State with an eID issued by his Member State should be able to use this as the means of identification towards e.g. a public authority in any other Member State.

Assuming that all Member States implement digital identity solutions adhering to eID, this would allow a service provider to easily and securely determine the customer's home country. This approach would require one login using the eID-compliant national solution for the service provider to determine the customer's Member State of residence. Subsequent logins could be managed by tokens or username/password solutions as long as they have been mapped to the eID identity.

Table 5 below shows the number of Member States where eID has been implemented and has been made available to the private sector. The majority of Member States rely on physical cards that require a card reader in order to establish the identity of a citizen. Fewer countries have implemented two-factor authentication based on mobile apps<sup>65</sup> (e.g. Denmark).

**Table 5. eID availability for the private sector.**

Number of MS where eID is used in the private sector	Number of MS where eID is not used in the private sector	Number of MS where eID is planned to be used in the private sector
17	6	4

Source: Annex 4.

Two-factor authentication using eID is currently used in Denmark by multiple services such as banks and insurance companies or for payments with cards issued by Nets. We have identified two examples of a service provider using eID solutions in Denmark (see Box 2). Global service providers operating in Denmark (e.g. Netflix and HBO Nordic) usually rely on a combination of IP-address checking and payment card information. The most likely explanation is that the eID-based two-factor authentication is only available in Denmark, and service providers operating in multiple countries may prefer to use authentication methods that can be applied in all of the countries in which they operate.

### **Box 2. Case study about using eID for the verification of the Member State of residence**

At this point in time, national government eID solutions are considered to be the most trustworthy identification means for the verification of the Member State of residence. Currently, 17 EU Member States are making their eID solutions available for use by the private sector. The majority of Member States rely on physical cards (which require a card reader to implement identification), while other countries (e.g. Denmark) have implemented a two-factor authentication based on mobile apps. The two-factor is most commonly used by financial and insurance services, while the biggest online content service providers still rely on more traditional means (e.g. IP check and payment details). This may be due to the fact that generally international service providers tend to implement the same verification means across different countries and for this reason may stick to the means that are available in every Member State.

We have identified two Danish service providers that use the Danish eID solution – NemID. They both offer audio-visual streaming, catch-up and on-demand services. NemID is the official Danish digital signature for

<sup>64</sup> Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC OJ L 257, 28.8.2014, p. 73–114.

<sup>65</sup> Two-factor authentication involves authentication from two devices that are known to be in control of the user such as a browser on a PC and a mobile phone. This typically involves sending a message to a smartphone app and asking users to identify themselves there as well.



public digital services. It has been used for over 15 years for accessing online banking services and public authorities' self-services. It is a well-known and trusted solution in Denmark. NemID serves the service provider as an identification of the consumer at the point of signing up for services and thus indirectly determining the Member State of residence. It uses a two-factor identification scheme. As shown in Annex 4, eID is posed to be available to the private sector in most Member States and thus available cross-borders.

The use of eID to verify the country of residence has limitations for citizens with dual citizenship and for people with shifting residencies in multiple Member States. The main benefits of using eID for the service provider are as follows:

- It does not transfer disproportionate amounts of data, thus does not raise any data-privacy concerns.
- It is a solution trusted by governments for identification and used by e.g. banking services as a trusted means of identification.

The eID solution is a promising development for the verification of the Member State of residence under the Portability Regulation, but in its current state has not been sufficiently tested and implemented for cross-border implementation. The Danish service provider using NemID is currently only operating in the Danish market, whereas eID is broadly accepted and used for identification in multiple private sectors.

Source: Authors' own elaboration based on the interviews.

### *Innovations in identity management*

A number of innovations are under way or already available to support the process of establishing the identity and the Member State of residence of a subscriber to a digital service, such as the following:

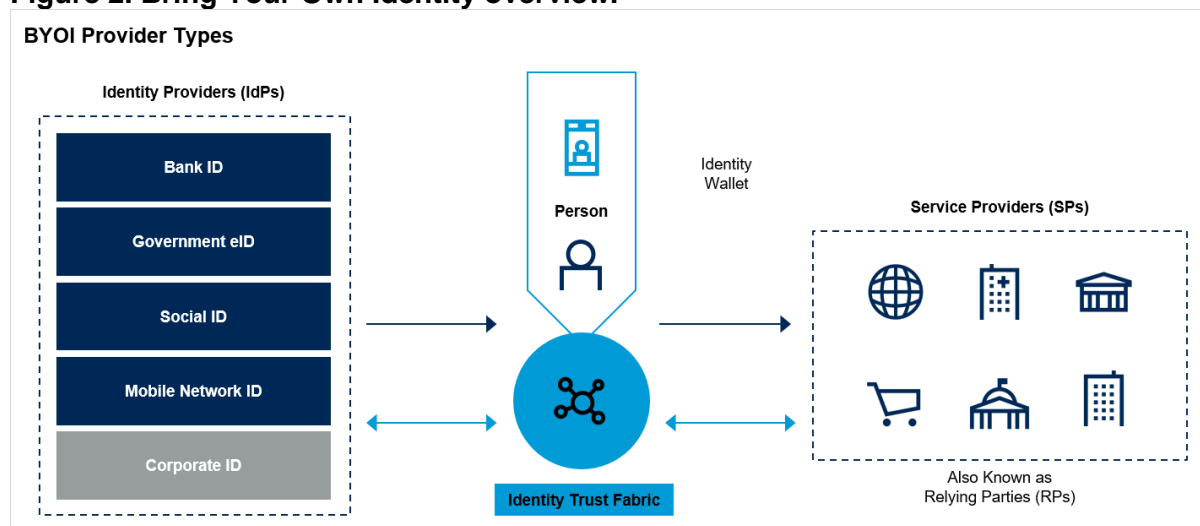
- **Virtual cards on mobile phones.** While eID implementation in some countries is based on physical cards and therefore require a card reader or a smartphone with an NFC chip<sup>66</sup>, solutions exist that allow subscribers to also identify themselves without a physical card reader or card with an NFC chip. For example, Open eCard<sup>67</sup> offers a solution for providing eID security on Android operating systems so that national identity solutions based on cards can be used on mobile phones and therefore do not need the physical card reader.
- **Bring your own Identity.** Identity Services are also discussed under the concept of Bring your own identity (BYOI). The concept of BYOI was built into the eIDAS legislation and it is available in 17 Member States<sup>68</sup>. Identity Services allow private organisations to utilize government eID for consumers to identify themselves securely. The idea is that service providers (such as providers of audiovisual content services) use credentials that originate from a source other than themselves. Examples of this in the scope of digital services covered by the Portability Regulation are presented in Box 2. Figure 5 below illustrates the logic behind the BYOI concept.

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<sup>66</sup> See, for example, <https://www.idnow.io/products/idnow-eid/>

<sup>67</sup> <https://www.openecard.org/startseite/>

<sup>68</sup> See Annex 4.

**Figure 2. Bring Your Own Identity overview.**

Source: Authors' own elaboration.

- Verifying Identity Innovations.** Several technologies are being made available for identifying a person such as facial recognition and iris scanning that are already extensively in use for e.g. unlocking smartphones<sup>69</sup>. These technologies make it very easy to validate a digital identity, but it requires a process of linking the digital identity with a physical/legal one. Thus, it does not directly affect the verification of the Member State of residence. Manual verification of the Member State of residence or using image recognition software on physical identity documents such as passport is also being deployed by, for example, providers of financial services. This means that solutions exist which scan your ID card/passport to verify nationality and identity<sup>70</sup>.
- Blockchains for identity management.** Distributed and decentralized identity networks based on blockchain technology offer potential solutions to verify identities, which provides better consumer control over personal data<sup>71</sup>. One such example is the WEF Known Traveller Digital ID (KTDI)<sup>72</sup>. This initiative provides a solution for the secure identification of travellers, combining a blockchain to ensure privacy and face recognition to improve the certainty of identification. The European Commission has invested in providing European Blockchain Services Infrastructure (EBSI)<sup>73</sup> a CEF Building Block, which provides support for establishing such decentralized identity networks based on blockchain.

### Delivering quality-of-service across geographies and network distance

A service provider delivering live or on-demand streaming of audio or audiovisual content puts significant requirements on the infrastructure delivering the data and in overall terms delivering a quality-of-service. Audiovisual streaming is the most demanding digital service in terms of requirements on the infrastructure when delivering a digital service. Audiovisual streaming should therefore be at the centre of attention when evaluating the impact driven by the Portability Regulation.

Quality of Service for the consumption of digital content is a complex concept. In network engineering, Quality of Service usually refers to basic measures of network performance, such as throughput, delay, or jitter. For multimedia services, in particular, Quality of Service means more. It also includes measures related to the overall quality of the experience, such as the time needed to change between channels, the time required to start a video or music stream, or the visual picture

<sup>69</sup> E.g. eID <https://www.electronicid.eu/en/use-cases/Account-Opening-Process-through-VideoIdentification>

<sup>70</sup> E.g. Revolut uses this to verify the identities of clients. <https://www.youtube.com/watch?v=PeP8XoRHdNo>

<sup>71</sup> E.g. <https://www.ibm.com/blockchain/solutions/identity>

<sup>72</sup> <https://www.weforum.org/reports/the-known-traveller-unlocking-the-potential-of-digital-identity-for-secure-and-seamless-travel>

<sup>73</sup> <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/ebsi>

quality. For the purpose of this report, we use a broader, multi-disciplinary definition of service quality, which includes perceptual aspects as well as application-level quality.

Providing a live or on-demand audio or audio-visual signal from a content service provider to a subscriber requires a proper infrastructure. It requires capacity in the systems serving the content, but equally important, an appropriate network infrastructure. In simple terms, a network infrastructure that provides sufficient bandwidth and a short network distance in terms of the number of network hops<sup>74</sup> travelled by the data packets in order to avoid packets that are lost due to network congestion. Typically, service providers need to invest in this beyond the basic best-effort of hosting a server with Internet access. Otherwise, the subscriber will experience service quality problems (e.g. jitter, delay) while streaming content.

From a technical perspective, content providers have **multiple options to deliver proper service quality** to their customers. The most common option today is to employ Content Delivery Networks and additional technological advancements such as Adaptive Bit Rate (ABR) streaming or peer-to-peer content distribution. Each option is shortly discussed below:

- **CDNs** constitute the most widely used and most interesting option in relation to the Portability Regulation. A CDN is basically a collection of interconnected servers in different geographical locations that replicates the delivered content for more efficient delivery to the consumers.<sup>75</sup> It basically makes sure that the content is cached close to the consumer.
- **ABR** streaming is a technique capable of adjusting video quality so that content is delivered without stalling or delays. This is basically adjusting the image quality to the available bit rate. This prevents stalling, but if the bandwidth is too low and the number of network hops too high, it does not solve the problem.
- **P2P** relies on the clients to help distribute content to other clients. If e.g. a movie is presently playing on another client's computer in the network vicinity, this other computer is used as a server of the movie supplementing a central server of the content provider. There are companies on the market such as Strivecast that offer Peer-to-Peer (P2P) and Over-the-top (OTT) content delivery solutions<sup>76</sup>, however, this technology still has to prove its commercial and technical viability.

Content Delivery Networks and associated services are evolving rapidly. Cisco expects that CDNs will be responsible for delivering approximately 72% of Internet traffic in 2022.<sup>77</sup> In essence, the idea of a CDN is rather simple as it provides for the replication of content (e.g. a movie) so that when it is streamed by a consumer, the actual movie data is closer to the consumer from a network perspective. It is, therefore, in computer science terms, an intelligent, distributed caching mechanism. The redundancy of content provided also improves resilience in the delivery and the ability to mitigate e.g. Distributed Denial of Service (DDoS)<sup>78</sup> attacks, thus improving service availability for a content service provider, ensuring better control and efficiency of service delivery. The technological innovations taking place within CDNs are mainly targeted at improving the intelligence of the caching mechanism. This is to ensure that the necessary content is available for a user without replicating everything everywhere and to improve routing efficiency. By its nature, the geographical mobility of a user constitutes a challenge to the use of CDNs, because CDNs may have to be deployed or used in other geographic areas. In addition, as a result of the Portability Regulation, the caching of existing CDNs must be adapted to serve content in new geographies. Nevertheless, **CDNs solve the technological challenges related to maintaining a high quality of online content services under cross-border portability.**

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<sup>74</sup> The Network Hop is when a data packet is routed from one segment to another. The hop count drives network latency and bandwidth limitations rather than physical distance travelled.

<sup>75</sup> GlobalDots (n.d.). Content Delivery Network Explained. GlobalDots. Available online at:

<https://www.globaldots.com/content-delivery-network-explained#content-delivery-networks-market-trends>

<sup>76</sup> <https://strivecast.com/p2p-video-delivery/>

<sup>77</sup> Cisco (2019), Cisco Visual Networking Index: Forecast and Trends, 2017–2022

<sup>78</sup> See e.g. <https://www.cloudflare.com/learning/ddos/what-is-a-ddos-attack/>

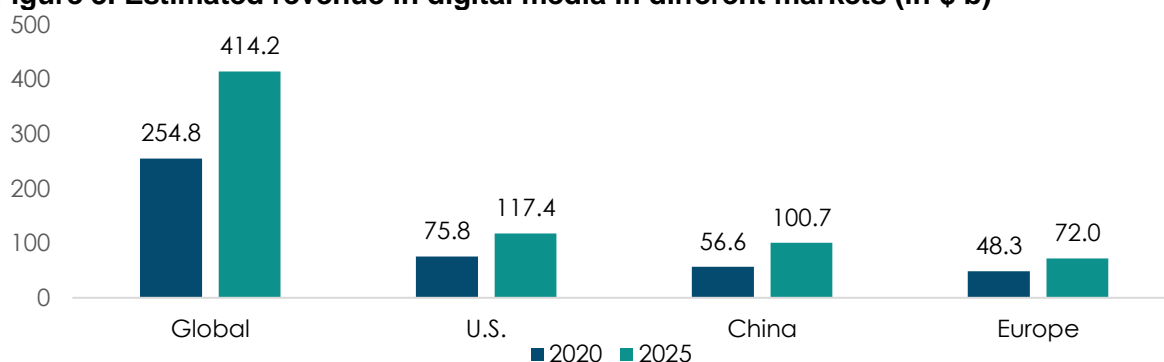
A few large content service providers such as YouTube and Netflix operate their own CDNs<sup>79</sup>. Most content service providers rely on CDN as a service. There are several traditional CDN providers such as Akamai and others focusing on this, but other players have entered the market as well. Large cloud service providers such as Amazon (AWS)<sup>80</sup> and Microsoft Azure are providing CDN services using their data centre's infrastructure. Also, players with a background as telecom service providers<sup>81</sup> who have been collaborators or subcontractors of CDN providers are starting to market the service directly to content service providers.

The consumption of audiovisual content on mobile networks poses new challenges to content delivery as the locally available bandwidth at a particular mobile network mast position can vary greatly with the number of other users. Recently, infrastructure providers that manage mobile network infrastructures are offering new innovations in Adaptive Bit Rate technologies that are deployed as an aspect of a mobile CDN service. The technology dynamically adjusts the compression level and video quality of a stream to match bandwidth availability on a particular mast position. This enables service providers to deliver content with varying network capacity. The mobile network infrastructure provider has access to real-time bandwidth intelligence provided by the local radio scheduler, which can be utilised to optimize performance to very local conditions.

### 2.1.3. Overview of market developments

This section describes recent developments in the European<sup>82</sup> video-on-demand, e-book, video game and digital music market. It identifies key players and market shares, and (expected) growth rates. Overall, the digital content market is in continuous change in Europe. In 2020, its worth was estimated at more than \$48 b, making Europe the third largest digital media market in the world behind the USA and China (see Figure 3 below). The digital content market in Europe is expected to grow annually by 8.3% and lead to revenues of up to \$72 b in Europe in 2025.<sup>83</sup>

**Figure 3. Estimated revenue in digital media in different markets (in \$ b)**



Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

### Video-on-demand (VoD) market

The **video-on-demand (VoD) market** is developing swiftly and is the key driver of the growth in digital content services. Revenue in the European VoD segment is expected to rise from \$15.3 b in 2020 to \$23.1 b by 2025, with an average growth rate of 8.6% (see Figure 4 below).<sup>84</sup>

<sup>79</sup> On Netflix CDN: [https://openconnect.netflix.com/en\\_gb/](https://openconnect.netflix.com/en_gb/)

<sup>80</sup> See e.g. <https://aws.amazon.com/cloudfront/> for the AWS CloudFront CDN service.

<sup>81</sup> E.g. <https://www.verizondigitalmedia.com/media-platform/delivery/network/>

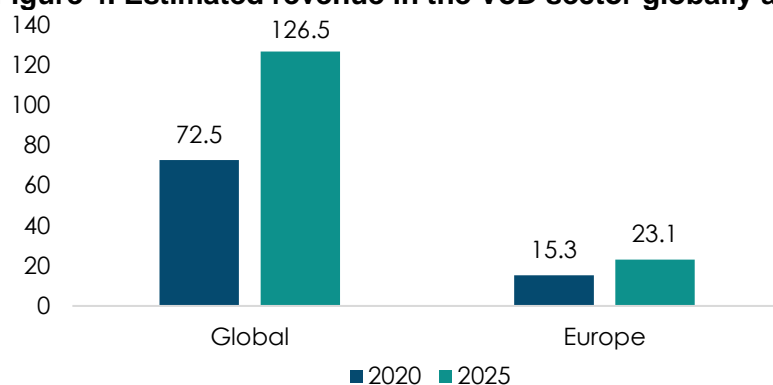
<sup>82</sup> Please note that it is not clear if the numbers for Europe refer to the EU-27 and the UK or a broader understanding of Europe. The same is the case for all other statements referencing Europe in contrast to the USA, China and the global market.

<sup>83</sup> Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

<sup>84</sup> Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

According to MAVISE, a free-access database on television channels and on-demand services and licences, which is managed by the European Audiovisual Observatory (EAO), there are approx. 1,000 regionally scattered subscription and transactional VoD service providers in Europe, varying in size and popularity.<sup>85</sup> According to the EAO VoD, revenues have skyrocketed in the EU-27 and the UK over the last decade: while revenues in the sector were only €388.8 m in 2010, they climbed up to approx. €11.6 b in 2020<sup>86</sup>. This surge was mainly driven by subscription-based VOD services (SVoD). SVoD revenues increased from a mere €12.1 m in 2010 to a whopping €9.7 b in 2020. Thus, the compound annual growth rate of VoD was 40% over this period. While SVoD revenues accounted for only 3% of VoD revenues in 2010, they represented 84% of the revenues generated in 2020 (the compound annual growth rate of SVoD was 95%). VoD consumer revenues were multiplied by a factor of 30 over the last ten years<sup>87</sup>. Over this timeframe, (VoD) content consumption has changed enormously. With the launch of Netflix and Amazon Prime Video and a number of other services at the beginning of the 2010s, SVoD subscriptions benefited from rapid consumer adoption – globally and in Europe. In 2020, there were approx. 140 m subscriptions to SVoD services in the EU-27 and the UK, of which Netflix held the largest market share (39%; 54.4 m subscribers), followed by Amazon (29%; 40.3 m)<sup>88</sup>. Together with Apple TV+ (9%; 12.2 m) and Disney+ (7%; 10.0 m) that have recently entered the European market, they make up for more than 80% of the market<sup>89</sup>. Subscription video on demand (SVoD) services are expected to continue to increase in significance within the European audiovisual services market.

**Figure 4. Estimated revenue in the VoD sector globally and in Europe (in \$ b)**



Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

With new international services entering the European VoD market since 2018 (Apple TV+ and Disney+), European media groups launched their own VoD and SVoD services (e.g. ProSiebenSat.1/Discovery Inc.'s Joyn in Germany; Slovenian Plus Pro's Voyo; Telecom Italia's TIMvision). This development helps European service providers compete with global players and provides them with an advantage over traditional service providers that do not offer their own VoD/SVoD services as they are now able to collect valuable data on the behaviour of their users (e.g. user ratings and review of films or used device).

In early 2020, 460 SVoD catalogues operated by 200 different SVoD services were available in the EU-27 and the UK, offering diverse content from general entertainment services to niche services and including local services, which are being operated by national broadcasters, telecom players, distributors/producers or pure VoD players<sup>90</sup>. With 34 different services, France had the highest number of SVoD services in Europe, followed by Poland (30) and Germany (28). The lowest

<sup>85</sup> European Audiovisual Observatory (n.d.): MAVISE. Available online at: <https://mavise.obs.coe.int/>

<sup>86</sup> European Audiovisual Observatory (2021): Trends in the VOD market in EU27 and the UK. Available online at: <https://rm.coe.int/trends-in-the-vod-market-in-eu28-final-version/1680a1511a>

<sup>87</sup> Ibid.

<sup>88</sup> European Audiovisual Observatory (2021): Trends in the VOD market in EU27 and the UK. Available online at: <https://rm.coe.int/trends-in-the-vod-market-in-eu28-final-version/1680a1511a>

<sup>89</sup> Ibid.

<sup>90</sup> Ibid.



numbers can be found in Belgium (12), Malta and Luxemburg (7 respectively). The average number in the EU-27 and the UK is 16<sup>91</sup>.

With Netflix, Amazon Prime Video and YouTube Premium being available everywhere in Europe today, SVOD services are estimated to surpass paid-TV players in terms of number of subscribers in 2021. They would thus become the main subscription-based entertainment source for a large share of EU-27 with room to grow ahead as the majority of countries in Europe do not yet qualify as maturing or mature markets (i.e. markets in which more than 50% of all households have adopted SVoD)<sup>92</sup>.

Moreover, the number of original SVoD content (content produced by online content service providers) is steadily increasing. This is also the case for European SVoD service providers. While there were only 51 European SVoD titles available in 2015, representing 16% of total SVoD original titles, this number rose to 267 in 2019, now accounting for one fifth of all SVoD originals<sup>93</sup>. Unsurprisingly, this development has been mainly driven by Netflix, which has increased its content spend continuously every year, from \$4.9 b to \$17.3 b in the 2015-2020 period<sup>94</sup>. As new players enter the market, the number of SVoD original titles will likely further increase.

In order to secure unique selling propositions, VoD providers acquire exclusive rights for premium films and series, which results in heterogenous catalogues offering combinations of titles, which may not be available anywhere else and reinforces market competition. In light of this, the newcomer Disney+ has announced that it will withdraw its licences for Disney productions from Netflix and other online content service providers and offer its own content exclusively on its own platform. This means that existing films and series from Disney are gradually disappearing from other streaming platforms and new Disney releases will no longer appear on other providers but only on Disney+. VoD service providers are encouraged to increase their investment in the development of original content production, as their content library is starting to lose video titles because large USA media giants are increasingly making their content exclusive to their own streaming service.

Providers offering services based on Advertising-Video-On-Demand (**AVoD**) **services** in Europe experienced growth within the last years.<sup>95</sup> AVoD are online content services that are made available to users for free but are ad-supported by adding advertisement in any manner to the content. The growth in this sector is primarily driven by YouTube as the most dominant actor in Europe.<sup>96</sup> Even if the AVoD market in Europe is still in a consolidation phase, there are more and more European attempts to establish partnerships between domestic actors. For instance, Discovery and ProSieben in Germany launched the Joyn freemium platform in 2019, also to improve their accessibility. And if international players such as Pluto TV or Rakuten entered the European market, this would likely stimulate the AVoD market in Europe, too.

There is also a separate market for live-TV streaming (e.g. Zattoo and Waipu in Germany). This latter market seems to be very national and sometimes even scattered across different services/apps nationally because of each broadcasting group having its own app (e.g. Joyn or TVNow in Germany). A short overview of the live-TV streaming market in Germany is provided in the box below.

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<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

<sup>95</sup> Statista (2016). Advertising video on demand (AVOD) revenues in Europe 2010-2021. Available online at: <https://www.statista.com/statistics/642370/avod-revenues-in-europe/>

<sup>96</sup> Daxis (2020). EUROPEAN AVOD REVENUES ARE GROWING FASTER THAN SVOD. Available online at: <https://daxis.com/research/european-avod-revenues-are-growing-faster-than-svod/>

### Box 3. Case study about live-TV streaming services offered in Germany

Digital live-TV content is traditionally served using satellite (DVB-S), cable (DVB-C) and terrestrial radio networks (DVB-T2). However, as more and more households use broadband network connections, streaming of live-TV using IPTV (Internet Protocol Television) or OTT (Over-the-top) is increasing. Classic IPTV providers (e.g. Magenta TV from Telekom, 1&1 Digital TV) use the IPTV protocols and supply channels to TV devices via a physical set-top box. Compared to traditional cable TV, video and audio signals are transmitted using the IP-protocol (hence the name IPTV). Traditionally, an internet connection from the same provider is necessary so that classic IPTV service can only be offered by the same company supplying the underlying broadband connection. However, more recently some providers have also made their service available independently from a broadband subscription (e.g. Magenta TV). Additionally, there are providers who are not vertically integrated with a broadband provider and therefore work independently. They stream regular TV programs via apps or browser to the computer, tablet, mobile phone or TV devices. This is referred to as over-the-top delivery (OTT). The major Live-TV streaming services in Germany are Zattoo, waipu.TV or Joyn. In addition, Deutsche Telekom offers Magenta TV via an app (to provide Live-TV streaming services not only for internet-users of Telekom but also for those independent of the internet provider via this app).

Just like traditional TV, Live-TV streaming offers live content at a specific time on a specific (local) channel – but streaming services deliver entertainment via the internet. In addition to German channels or global channels (e.g. CNN), which are also available in free of charge versions, the streaming providers mentioned above offer several paid (on a subscription basis) additional packages with channels from other countries. Waipu.TV offers, for example, a separate package with Turkish channels and Zattoo offers channels from Poland, Turkey, Croatia, Bosnia, Serbia, Brazil.<sup>97</sup>

Waipu.tv enables catch-up TV (with the "Replay" function, Live-TV programs can be watched within seven days). In addition, Waipu.tv has offers to bundle its "Perfect Plus" package with full Netflix packages (Netflix BASIS, STANDARD or PREMIUM package).<sup>98</sup> Users can use their existing Netflix package and combine it with waipu.tv or buy a new one. An additional feature of the IPTV is the recording of programs. Depending on the chosen type of subscription, there is a limit for this. Waipu.tv bills for this feature by the hours used, but allows the booking of additional recording storage. Waipu.tv is designed for use in the home network. Perfect Plus subscribers are enabled with cross border portability, while Comfort (another paid plan) subscribers need to order an additional mobile option (for €5 a month) to access services outside of the consumer's home network, including cross-border portability, to work.<sup>99</sup>

As of March 2021, Zattoo is available in Germany, Switzerland and Austria. Zattoo also offers catch-up TV (with its "Replay" function; Live-TV programs can be watched within seven days). As Waipu.tv, Zattoo offers a record function. Depending on the chosen type of subscription, there is a limit for this. Zattoo bills by the number of recordings but allows booking additional recording storage. As a Swiss Premium and Ultimate user, you have the possibility to access your recordings worldwide.<sup>100</sup> As a German or Austrian Premium and Ultimate user, you can temporarily (90 days) use your subscription in other EU countries (e.g. vacation, business trip, semester abroad, internship abroad).<sup>101</sup>

Joyn is one of the younger providers on the German market for Live-TV streaming (founded in 2017 by the media groups ProSiebenSat.1 Media and Discovery). Compared to waipu.tv, users can watch private TV-channels in the free basic package, which is ad-financed. With the paid Joyn plus+ package, even more (HD) channels and additional content are available in a video library with series and films. Compared to Zattoo or Waipu.tv, this package is comparatively cheap (6.99€/month), but the recording, restart and pause functions are completely missing. Cross-border portability is not offered in the free basic package from Joyn. Only Joyn Plus+, offers cross-border portability.<sup>102</sup>

Live-TV Streaming services and VoD-services are mutually beneficial as they complement real-time (linear) content like news, sports events, live shows or documentaries with fictional films and series.

Source: Authors' own elaboration based on sources indicated in the box.

Beyond that, many service providers have specialised in the streaming of events, especially in the domain of sports. Operating on a European scale are companies such as UK-based DAZN or Sky

<sup>97</sup> Zattoo (2021a) Internationale Sender. Available online: <https://zattoo.com/de/angebote#additionalpackage>

<sup>98</sup> Waipu.tv (2021a) Netflix mit waipu.tv zum Vorteilspreis. Available online: <https://www.waipu.tv/netflix/>

Group, that provide subscription-based live and on-demand streaming services of mass sports events such as (inter)national football matches as well as less popular events like car races or boxing fights. It can be presumed that the majority of DAZN's reported 8 m global subscribers are located within Europe.<sup>103</sup> In the EU, in 2019 around 17% of the population used paid sports streaming services.<sup>104</sup> In Germany, in 2018 already 18% of the population used paid sports streaming services, implying that it is a huge and likely strongly growing market.<sup>105</sup> Based on viewer numbers in regard to live-streamed football matches in Germany (e.g. an average of around 1.2 m viewers watched the FC Bayern Munich matches broadcast by Sky Deutschland), it can further be assumed that especially sports rooted deeply in tradition and culture like football, draw in a lot of users of all age groups.<sup>106</sup>

In 2020, the continuing **COVID-19 crisis** created enormous change. This change also includes the online content service market, where the pandemic has already changed the media consumption habits of consumers in the short term, and probably will also do so in the long term. Governments ordered cinemas or live entertainment venues to close, which led consumers to demand content online to a greater extent. Social viewing, live streaming, movie festivals that moved online or movies that release to digital services have all seen strong increases especially during phases of stay-at-home orders.

In the USA, 80% of consumers now subscribe to at least one paid streaming video service compared to 73% in 2019 in a pre-COVID-19 survey.<sup>107</sup> In France, the consumption of online content has significantly increased during the lockdown periods. While one third of Internet users (36%) subscribed to a video on demand service in 2019, there were about half of them (49%) at the end of the first lockdown in 2020. The number of subscribers to video on demand services increased from 3.8 to 4.5 million between March and September 2020.<sup>108</sup> This behaviour mirrors the increase in online purchases during the heyday of the Corona crisis as has been widely reported.<sup>109</sup> To attract subscribers, especially within the first month of COVID-19, service providers offered introductory packages free of costs or at reduced rates. Now, with cheap rates and easy cancellation rules,

<sup>99</sup> Waipu.tv (2021b): Kann waipu.tv auch im Ausland genutzt werden? Available online:

<https://hilfe.waipu.de/hc/de/articles/212027549-Kann-waipu-tv-auch-im-Ausland-genutzt-werden-https://www.privacytutor.de/vpn/streaming/waipu-tv-im-ausland/>

<sup>100</sup> Zattoo (2021b): Wo ist Zattoo verfügbar. Available online: <https://support.zattoo.com/hc/de/articles/200281268-Wo-ist-Zattoo-verf%C3%BCgbar->

<sup>101</sup> Zattoo (2021c). Streamen mit Zattoo Premium und Ultimate Deutschland im EU-Ausland: Available online: <https://support.zattoo.com/hc/de/articles/115005059473-Streamen-mit-Zattoo-PREMIUM-und-Ultimate-Deutschland-im-EU-Ausland>

<sup>102</sup> Joyn (2021): Nutzung im EU-Ausland. Available online: <https://community.joyn.de/dein-plus-abo-38/nutzung-im-eu-ausland-1155>

<sup>103</sup> Wall Street Journal (2019): DAZN Gives Away Content to Punch Up Subscriber Base. Available online at: <https://www.wsj.com/articles/dazn-gives-away-content-to-punch-up-subscriber-base-11575633606>.

<sup>104</sup> Kantar Public (2019). Flash Eurobarometer 477a: Accessing content online and cross-border portability of online content services. Report prepared at the request of European Commission. Available online at:

<https://ec.europa.eu/comfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

<sup>105</sup> Statista (2018). Nutzen Sie Streaming-Angebote (z.B. Sky Ticket, Eurosport 1) auch für Sportsendungen? Available online at: <https://de.statista.com/statistik/daten/studie/909378/umfrage/nutzung-von-streaming-fuer-sportsendungen-in-deutschland/>

<sup>106</sup> Statista (2020d): Durchschnittliche Quoten der Bundesligavereine bei Sky Deutschland in der Saison 2019/2020. Available online at: <https://de.statista.com/statistik/daten/studie/204358/umfrage/quoten-ranking-der-bundesligavereine-bei-sky-deutschland/>.

<sup>107</sup> Deloitte (2020). Digital media trends survey, 14th edition. Available online at:

[https://www2.deloitte.com/content/dam/insights/us/articles/6456\\_digital-media-trends-covid/DI\\_Digital-media-trends-14th-edition.pdf](https://www2.deloitte.com/content/dam/insights/us/articles/6456_digital-media-trends-covid/DI_Digital-media-trends-14th-edition.pdf)

<sup>108</sup> Hadopi, CSA (2021). La multiplication des services de vidéo à la demande par abonnement. Stratégies de développement et impact sur les usages. Report. Available online at: <https://www.hadopi.fr/ressources/etudes/multiplication-services-video-demande-par-abonnement-strategies-developpement-impacts-usages>

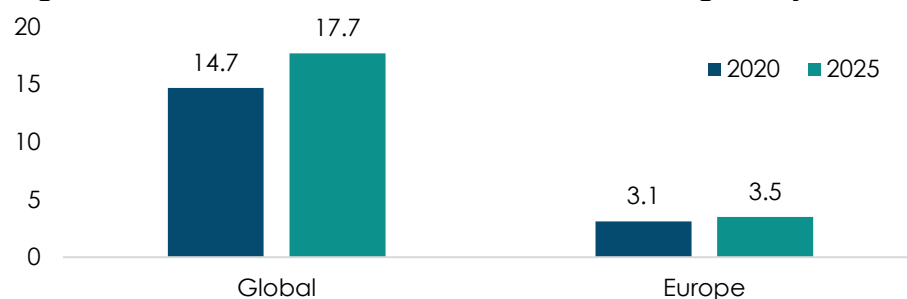
<sup>109</sup> Digital Commerce (2020): More than one-third of consumers shop online weekly since coronavirus hit. Available online at: <https://www.digitalcommerce360.com/article/coronavirus-impact-online-retail/>

consumers can binge-watch their preferred movies or shows, cancel a subscription, and return when a new season or episode is released.

### E-book market

The **e-book market** in Europe is continuously growing, too. In 2011 it represented only 1% of the total book market in Europe<sup>110</sup> and this share increased to 7% in 2016.<sup>111</sup> In 2020, revenues in the European e-book market reached \$3.1 b and are expected to rise to \$3.5 b by 2025 (see Figure 5 below). The annual growth rate in the e-publishing sector is expected to be 3.9% in that timeframe.<sup>112</sup> In 2019, the revenue of the European e-book market constituted \$3.58 m, being surpassed only by the North American market (\$7.41).<sup>113</sup> It is estimated that there were approx. 120 m e-book users in Europe in 2019, of which about 45% are younger than 35 years old.<sup>114</sup> However, in the EU there are large differences among the markets.<sup>115</sup>

**Figure 5. Estimated revenue in the e-book sector globally and in Europe (in \$ b)**



Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

Germany is considered one of the most lucrative e-book markets in the world.<sup>116</sup> In 2015, e-books accounted for 5% of all book sales<sup>117</sup> and 25% of Germans read e-books daily.<sup>118</sup> In 2019, 8.68 m Germans read books on electronic devices, with 3 m more readers than in 2015, constituting an increase of more than 50% during that timeframe.<sup>119</sup> However, it must be noted that e-books as well as printed books have to be sold at the same price at every retailer, a form of resale price maintenance known as a fixed book price (*Buchpreisbindung*). This mechanism is aimed at limiting competition between booksellers by not allowing them to compete with lower price. Such a mechanism also exists in other EU countries. The French market is growing fast as well. For example, the e-book market share in France increased from 4.1% in 2013 to 6.4% in 2014.<sup>120</sup> The Spanish e-book market share was also around 6% in 2015. Interestingly, 60% of the Spanish

<sup>110</sup> Kozlowski, M. (2017). The State of the European eBook Market. GoodEReader. Available online at: <https://goodereader.com/blog/e-book-news/the-state-of-the-european-ebook-market>

<sup>111</sup> FEP (2017). The book sector in Europe: Facts and figures. Federation of European Publishers. Available online at: <https://fep-fee.eu/-Publications->

<sup>112</sup> Statista (2020a): Digital Media Report 2020. Available online at:

<https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

<sup>113</sup> Mordor Intelligence (2019). Global e-book market: Growth, trends, and forecast (2020-2025). Mordor Intelligence, Industry Reports. Available online at: <https://www.mordorintelligence.com/industry-reports/e-book-market>

<sup>114</sup> Statista (2019): eBooks Europe. Available online at:

<https://www.statista.com/outlook/213/102/ebooks/europe#market-age>.

<sup>115</sup> Kozlowski, M. (2017). The State of the European eBook Market. GoodEReader. Available online at: <https://goodereader.com/blog/e-book-news/the-state-of-the-european-ebook-market>

<sup>116</sup> Ibid.

<sup>117</sup> European Parliament (2016). E-Books: Evolving markets and new challenges. Briefing. Available online at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/577954/EPRS\\_BRI%282016%29577954\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/577954/EPRS_BRI%282016%29577954_EN.pdf)

<sup>118</sup> Kozlowski, M. (2017). The State of the European eBook Market. GoodEReader. Available online at: <https://goodereader.com/blog/e-book-news/the-state-of-the-european-ebook-market>

<sup>119</sup> Mordor Intelligence (2019). Global e-book market: Growth, trends, and forecast (2020-2025). Mordor Intelligence, Industry Reports. Available online at: <https://www.mordorintelligence.com/industry-reports/e-book-market>

<sup>120</sup> Kozlowski, M. (2017). The State of the European eBook Market. GoodEReader. Available online at: <https://goodereader.com/blog/e-book-news/the-state-of-the-european-ebook-market>



publishers' digital sales were made internationally. Half of these sales came from Latin America, 20% from the USA market and 10% from Europe.<sup>121</sup>

It is expected that the European e-book market will grow steadily, and there are numerous reasons for this. Firstly, VAT rates for e-books are decreasing. In 2014, the average VAT for printed books was 7.6% and the VAT rate for e-books stood at 19.9%.<sup>122</sup> As of today, 12 members of EEA have announced important cuts in VAT applicable to electronic publications. For example, Germany recently confirmed VAT cuts from 19% to 7%.<sup>123</sup> Secondly, there are several renowned education institutes in Europe that encourage their students to use digital content instead of conventional books.<sup>124</sup> Thirdly, the technical development of reading devices drives environment protection campaigns that advocate for a reduction in the use of paper and may fuel the popularity of e-books in Europe. Other potential reasons include access to a wider range of e-book libraries and increasing revenues for publishers from the sale of e-books.

Amazon is undoubtedly a significant player in the e-book market in Europe. Originally a seller of physical books, it has turned into, among other things, one of world's largest online distribution services for e-books. Having started the sale of digital media almost 15 years ago, Amazon's e-reader, Kindle, and the associated Kindle Store have become household names. As of 2020, Amazon offers access to an e-book catalogue of more than 6m titles. It provides an e-book flat rate (up to ten books available at once via Kindle Unlimited), a self-publishing service for authors and special offers to its Prime customers (access to free e-books, some of which are of high quality and demand), creating a convenient infrastructure with easy purchase solutions, proprietary reading devices and reading apps. With e-book market shares of more than 60%, Amazon dominates in European countries with large e-book markets (see Figure 6 below).<sup>125</sup>

Other contenders, such as the Google Play Store, Apple iBooks or smaller regional providers – like Fnac (France), Casa del Libro (Spain) or laFeltrinelli (Italy) – do not pose major competition to Amazon in those markets.<sup>126</sup> Most of these providers offer transactional services (meaning customers need to pay for individual titles at their shelf price in every case). However, some services in various Member States do offer subscription options: the ones identified during this study are Youboox available in France and Kobo Plus currently available in Belgium and the Netherlands<sup>127</sup>. In addition, on top of their transactional services, Amazon has also started to offer subscription options (Kindle unlimited) in some EU countries (e.g. Spain, Germany, France). Often, there are also e-books that customers can download for free (usually being less sophisticated literature), which allows the providers to gather data on them and results in a higher likelihood for paid purchases as an account needs to be set up for free downloads.

However, it is important to note that the worldwide annual growth rate for e-books apparently does not keep up with the pace of expected growth rates for other e-publications. With the global e-book market is only growing by 3.7% each year, it is important to watch out for the developments of e-magazines and e-papers (digital newspapers) in comparison, as the latter are growing by 7.4% and 7.8% each year respectively.<sup>128</sup>

<sup>121</sup> Ibid.

<sup>122</sup> European Parliament (2016). E-Books: Evolving markets and new challenges. Briefing. Available online at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/577954/EPRS\\_BRI%282016%29577954\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/577954/EPRS_BRI%282016%29577954_EN.pdf)

<sup>123</sup> Mordor Intelligence (2019). Global e-book market: Growth, trends, and forecast (2020-2025). Mordor Intelligence, Industry Reports. Available online at: <https://www.mordorintelligence.com/industry-reports/e-book-market>

<sup>124</sup> Hexa Research (2017). E-book Market Size and Forecast, By Genre (Fiction, Nonfiction & Education, Literature, Children's book, Comics & Graphic Novel), And Trend Analysis, 2014 - 2024. Hexa Research. Available online at: <https://www.hexaresearch.com/research-report/e-book-market>

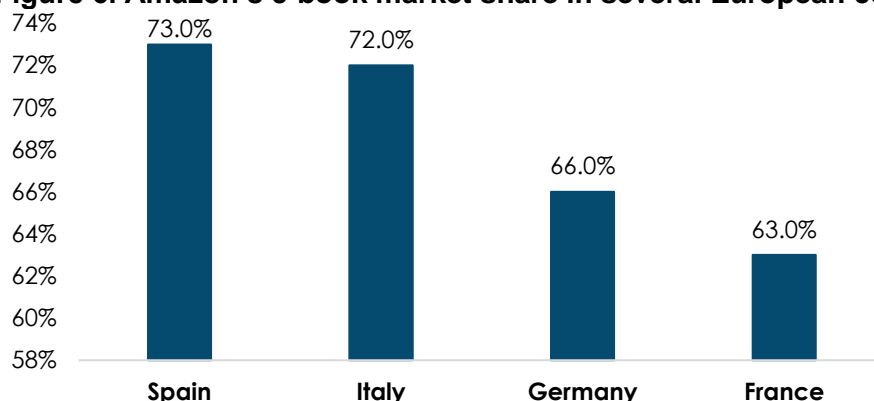
<sup>125</sup> Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

<sup>126</sup> Ibid.

<sup>127</sup> <https://kobowritinglife.zendesk.com/hc/en-us/articles/115010075768-What-is-Kobo-Plus->

<sup>128</sup> Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

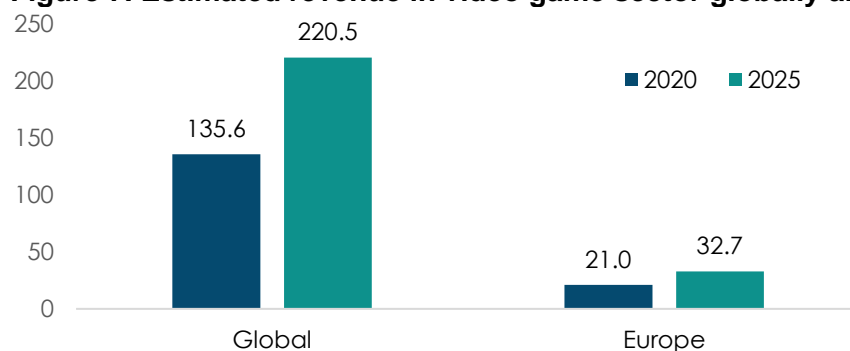


**Figure 6. Amazon's e-book market share in several European countries in 2020**

Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

### Video game market

Just like the VoD and e-book segment, the **video game market** is also growing strongly in the EU. According to an ISFE report in 2018, the EU video game market grew by 15% compared with 2017.<sup>129</sup> It is estimated that revenue will rise to \$32.7 b by 2025 (see Figure 7 below), growing by 9.2% each year from \$ 21.0 b in 2020.<sup>130</sup>

**Figure 7. Estimated revenue in video game sector globally and in Europe (in \$ b)**

Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

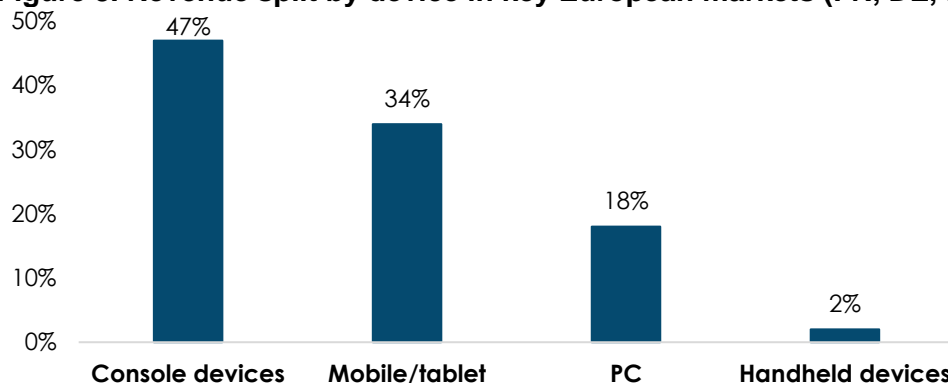
The key EU markets for video games are France, Germany and Spain (see Figure 8 below). In these three markets and the UK, 47% of their revenue is brought in by console devices, 34% is driven by mobile/tablet, 18% of revenue is brought by PC and only 2% corresponds to handheld devices. The highest share of gamers is observed in the 11-14 age group (84%), followed by the 6-10 age group (76%), and the 15-40 age group (74%) (see Figure 8 below).<sup>131</sup> Based on the age structure of its user base, the game industry is expected to grow massively in the next few decades. The average gamer in the EU is 31 years old, the 25-34-year-old age group is the strongest growing one (+8% in 2018, and – notworthily –, 46% of gamers in the EU are female.<sup>132</sup>

<sup>129</sup> ISFE (2019). Key facts: 2018 trends & data. ISFE Europe's video game industry. Available online at: <https://www.isfe.eu/wp-content/uploads/2019/08/ISFE-Key-Facts-Brochure-FINAL.pdf>

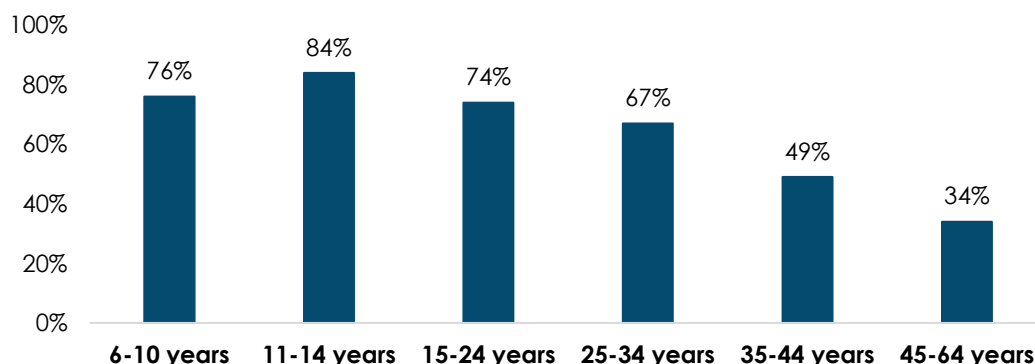
<sup>130</sup> Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

<sup>131</sup> Ibid.

<sup>132</sup> Ibid.

**Figure 8. Revenue split by device in key European markets (FR, DE, ES, UK) in 2018**

Source: ISFE (2019). Key facts: 2018 trends & data. ISFE Europe's video game industry. Available online at: <https://www.isfe.eu/wp-content/uploads/2019/08/ISFE-Key-Facts-Brochure-FINAL.pdf>

**Figure 9. Share of gamers among the whole population by age group in key European markets (FR, DE, ES, UK) in 2018**

Source: ISFE (2019). Key facts: 2018 trends & data. ISFE Europe's video game industry. Available online at: <https://www.isfe.eu/wp-content/uploads/2019/08/ISFE-Key-Facts-Brochure-FINAL.pdf>

Germany, for instance, being one of the biggest video game markets, has experienced a 9% growth from €4 m to nearly €4.4 m from 2017 to 2018 in video game related markets (including in-game and other purchases, hardware, charges for online services, and subscriptions). Some 520 companies in Germany are active in the development and marketing of games, providing jobs for over 11,000 people.<sup>133</sup> 15% of all video gamers in Germany are over 60 years old; almost every one in four is a child or a teenager (8%: 9 years and younger; 16%: 10-19 years); 30% are between 20 and 39 years old (14%: 20-29 years; 16%: 30-39 years); another 14% can be found in the 40-49 age group and 17% are between 50 and 59 years old.<sup>134</sup> A similar age distribution can be observed in other markets like France and Spain.<sup>135</sup>

The video game industry is witnessing the growth of cloud gaming. Cloud gaming lets a user play a game without any special requirements on the device-side. This means that a game can be played directly in a browser on a PC or, for example, a generic app on a mobile device. It does not require specialized hardware (as with, for example, PlayStation) or installed software on the part of the client. It is forecast that cloud gaming revenue will grow to US\$4.5b and there will be 42 million active

<sup>133</sup> The German Games Industry Association (2019). The German games industry 2019. Insights, facts and reports. Available online at: [https://www.game.de/wp-content/uploads/2017/02/2019-10-31-Guide-to-the-German-Games-Industry\\_NEU.pdf](https://www.game.de/wp-content/uploads/2017/02/2019-10-31-Guide-to-the-German-Games-Industry_NEU.pdf)

<sup>134</sup> Statista (2020e): Verteilung der Videogamer in Deutschland nach Alter im Jahr 2020. Available online at: <https://de-statista-com.docweb.rz.uni-passau.de:2443/statistik/daten/studie/290890/umfrage/altersverteilung-von-computerspielern-in-deutschland/>

<sup>135</sup> Statista (2018): Breakdown of gamers in France, the United Kingdom, Germany and Spain in 1st quarter 2018, by age group. Available online at: <https://www.statista.com/statistics/448467/gaming-in-europe-by-age-and-country/>

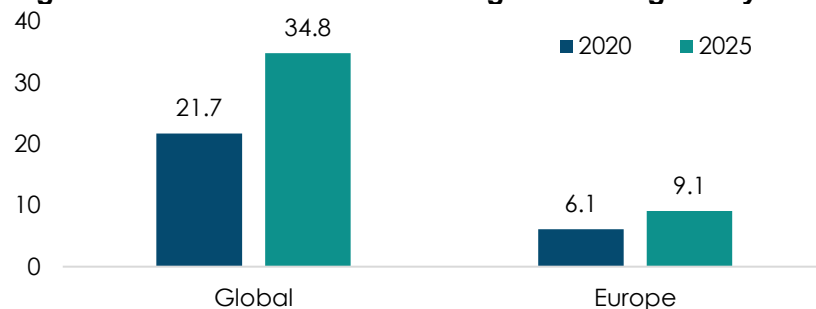
users by 2024.<sup>136</sup> The main players in this market are Alphabet Google (Stadia), Apple (Arcade), Microsoft (xCloud coming soon), Nvidia (GeForce NOW), Sony (PlayStation Now), and Tencent (START is in a testing phase); additionally, Amazon is scheduled to enter the market shortly.<sup>137</sup>

Another group of services, like Valve's Steam, EA's Origin, and Ubisoft's Uplay offer digital rights management, social networking, server hosting, and – of course – video streaming. Being the most popular distribution platform worldwide (market share: approx. 75%)<sup>138</sup>, Steam generated almost 30% of its sales in Western Europe alone in 2017.<sup>139</sup> As of March 2021, Steam offers an option to stream game with your own devices. Yet, Steam is also moving towards cloud gaming.<sup>140</sup> Instead of installing game software on the end-user device (PC, Mobil phone) it uses the Steam application as an environment for executing the gaming experience.

### Digital music market

The **digital music market** is growing rapidly in Europe. It is estimated to have reached \$6.1 b in revenue in 2020. In 2017, digital music revenue had only been \$3.7 b.<sup>141</sup> Furthermore, it is expected that revenue in the digital music sector in Europe will have climbed up to more than \$9 b by 2025 (see Figure 10 below), constituting an expected annual growth rate of 8.2%.<sup>142</sup> Music streaming took the largest share (87.3%) in 2019, with the rest belonging to music downloads. The latter is in decline, losing relevance every year. Yet, it is not expected to disappear completely.<sup>143</sup>

**Figure 10. Estimated revenue in digital music globally and in Europe (in \$ b)**



Source: Statista (2020a): Digital Media Report 2020. Available online at: <https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

Paid subscriptions for audio streaming in Europe are estimated to constitute 78.9% of all music streaming revenue.<sup>144</sup> The rest goes to ad-supported audio (9.9%) and ad-supported music video streaming<sup>145</sup> (11.2%). 230 digital music services are available across the EU, providing access to more than 40 million tracks.<sup>146</sup> The Swedish-based audio streaming and media provider Spotify alone had around 95 m monthly active users all over Europe in 2019, more than in any other region

<sup>136</sup> Bohlsen, M. (2020). A look at the 'GaaS' (cloud gaming, streaming, games as a service) sector and the main companies involved. Seeking Alpha. Available online at: <https://seekingalpha.com/article/4333366-look-gaas-cloud-gaming-streaming-games-service-sector-and-main-companies-involved>

<sup>137</sup> Ibid.

<sup>138</sup> Comparecamp (2020): 75 Steam Statistics: 2019/2020 Facts, Market Share & Data Analysis. Available online at: <https://comparecamp.com/steam-statistics/>

<sup>139</sup> GeekWire (2017): Valve reveals Steam's monthly active user count and game sales by region. Available online at: <https://www.geekwire.com/2017/valve-reveals-steams-monthly-active-user-count-game-sales-region/>

<sup>140</sup> STEAMWORKS (2021) Steam Cloud Play (Beta). Available online:

<https://partner.steamgames.com/doc/features/cloudgaming>

<sup>141</sup> Statista (2020f). Digital Music: Europe. Statista. Available online at: <https://www.statista.com/outlook/202/102/digital-music/europe>

<sup>142</sup> Statista (2020a). Digital Media Report 2020. Available online at:

<https://de.statista.com/statistik/studie/id/45113/dokument/digital-media-report/>

<sup>143</sup> Ibid.

<sup>144</sup> Impala (n.d.). European music in numbers. Independent Music Association. Available online at:

<https://www.impalamusic.org/node/9>

<sup>145</sup> Listening to music while streaming video (e.g. on YouTube or Vimeo).

<sup>146</sup> Impala (n.d.). European music in numbers. Independent Music Association. Available online at:

<https://www.impalamusic.org/node/9>

in the world.<sup>147</sup> In addition, companies like YouTube, Apple, and Amazon as well as smaller contenders like SoundCloud, Deezer, and Tidal have entered the paid audio streaming market in the last years. Average revenue per user in Europe was \$46 for streaming and only \$7 for music downloads, considerably less (approx. 60% correspondingly) than the amount per user in the USA.<sup>148</sup>

Furthermore, with the exception of Spain, prices for music downloads are being forecast to decline in the EU in the future. Within Europe, Germany showed the strongest demand for music streaming in 2019, with more than 11 m users, outranking France (4.9 m) and Spain (2.9 m). The great variety of pricing models, ranging from individual to more affordable family accounts and including cheaper options for students, as well as short cancellation periods may encourage even more consumers to subscribe to a streaming service.

### Overview of market developments on cross-border portability

Table 6 below provides an overview of the current state and potential future development of online content services by segment.

**Table 6. Current market situation of online content services**

<b>Video-on-demand (VoD)</b>	
Revenue	\$15.3 b (2020); exp. \$23.1 b (2025)
Growth rate	8.6% annually (exp. 2020-2025)
Users in the EU-27 and the UK	140 m (2020; only over-the-top SVoD)
Most important players	Netflix (39% market share in 2020), Amazon (29% m.s.)
Forecast of VoD market expansion	Significant expansion in terms of numbers of players and revenues (year-on-year growth rate of over-the-top SVoD subscriptions between 30% and 46% in the last 5 years) <sup>149</sup>
<b>Sports streaming</b>	
Users in Europe	More than 10 m
Market Penetration	18% in Germany; at least 7% in all of Europe
<b>E-book</b>	
Revenue	\$3.1 b (2020); exp. \$3.5 b (2025)
Growth rate	3.9% in e-publishing annually (exp. 2020-2025)
Users in the EU-27 and the UK	120 m
User age range	45% are younger than 35 years old
Revenue in key markets	UK: \$1 b, Germany: \$0.3 b, France: \$0.3 b, Italy: \$0.2 b, Spain: \$0.2 b (2019) <sup>150</sup>
Most important players	Amazon, Google Play Books, Apple iBooks
Forecast of market expansion	Steady growth because of a variety of technical improvements: \$4 b by 2025 <sup>151</sup>
<b>Video Game Market</b>	
Revenue	\$21.0 b (2020); exp. \$32.7 b (2025)
Growth rate	9.2% annually (exp. 2020-2025)
Percentage of age range that plays computer games	76% of 6-10 years old (y.o.), 84% of 11-14 y.o., 74% of 15-40 y.o.
Users in the EU-27 and the UK	386 m <sup>152</sup>
Key markets	France, Germany, Spain
New developments	Cloud gaming

<sup>147</sup> Statista (2020g): Share of Spotify's monthly active users worldwide in 2018 and 2019, by region. Available online at: <https://www.statista.com/statistics/813902/spotify-share-monthly-active-users-by-region/>

<sup>148</sup> Statista (2020): Digital Media Report 2020. Digital Music. Available online at: <https://www.statista.com/study/39314/digital-music-2018/>.

<sup>149</sup> European Audiovisual Observatory (2021): Trends in the VOD market in EU27 and the UK. Available online at: <https://rm.coe.int/trends-in-the-vod-market-in-eu28-final-version/1680a1511a>

<sup>150</sup> Statista (2020a): Digital Media Report 2020 – ePublishing. Available online at: <https://de.statista.com/statistik/studie/id/36522/dokument/digital-media-report/>

<sup>151</sup> Ibid.

<sup>152</sup> Statista (2020h): Number of video gamers worldwide in 2020, by region. Available online at: <https://www-statista-com.docweb.rz.uni-passau.de:2443/statistics/293304/number-video-gamers/>

<b>Most important players in the cloud gaming market</b>	Alphabet Google (Stadia), Apple (Arcade), Microsoft (xCloud), Nvidia (GeForce NOW), Sony (PlayStation Now), and Tencent (START), Amazon
<b>Expected growth of cloud gaming market</b>	Growth of revenue to \$4.5 b and 42 m active users by 2024
<b>Digital music market</b>	
<b>Revenue</b>	\$6.1 b (2020); exp. \$9.1 b (2025)
<b>Growth rate</b>	8.2% annually (exp. 2020-2025)
<b>Music streaming users in the EU-27 and the UK</b>	95 m monthly active users in Europe (Spotify only)
<b>Division of market</b>	Music streaming 87.3% and music download 12.7 %
<b>Market volume growth</b>	\$1.1 b in three years (forecast 2017-2020)
<b>Key markets</b>	Germany (11 m users) and UK (10 m users)
<b>New developments</b>	Music streaming (87.3% market share of the digital music market)
<b>Most important players in the cloud gaming market</b>	Spotify, YouTube, Apple, Amazon
<b>Forecast of digital music market</b>	Audio/music downloads are going to further decline as well as their price; 118 m users for music streaming and 76 m for music downloads by 2025 <sup>153</sup>

Source: Authors' own elaboration if not noted differently.

### Impact of market developments on cross-border portability

Firstly, the **strong increase in demand for online content services (more limited for e-books) increases the relevance of the Portability Regulation**. According to the figures stated above, all relevant segments (VoD, video game market, e-books, digital music market) are growing in the EU. However, the increased relevance of the Regulation slowed down in 2020 because of greatly reduced pan-European and global mobility (triggered by COVID-19). Nevertheless, with future improvements in traveller confidence and a major lifting of travel restrictions, the Portability Regulation will again play an important role in making sure that consumers can continue accessing their online content services when travelling in the EU.

Secondly, the **increased demand for cloud solutions will also impact the demand for cross-border portability**. Cloud solutions allow for remote access to services without the necessity of travelling with a device and/or the respective software, data, etc. This is particularly relevant for gaming services, where the use of gaming consoles likely hinders cross-border portability in many circumstances, such as business travel. Cloud gaming via portable devices increases the cross-border portability of the gaming services and is currently the strongest growth driver in the gaming industry.<sup>154</sup> Thus, in the gaming industry, the implementation of the Portability Regulation will be of increasing relevance. Also, we see a similar pattern in the music industry, as growth in the industry is driven by an increase in the market for cloud-based streaming services, whereas the market for downloads is decreasing.<sup>155</sup> In total, revenue in the digital music segment is expected to show an annual growth rate (CAGR 2020-2025) of 3.5%, and is likely to result in a projected market volume of \$5.4 b by 2025 (with \$5.0 b for music streaming and only \$0.4 b for downloads). Thus, also in the music industry, the relevance of the implementation of the Portability Regulation will further increase. For video-on-demand, we see a general growth in the market, which applies to all forms of revenue models (streaming, pay-per-view, and downloads). However, the – by far – strongest growth is happening in cloud-based streaming<sup>156</sup>, which provides consumers with the highest level of cross-border portability. In principle, it allows user to consume content wherever they are and with any device, without the need to bring their own set-top boxes, which will further increase the relevance of the Portability Regulation. For e-books, cloud solutions should not have any additional effect, as

<sup>153</sup> Statista (2020i): Digitale Musik – Europa. Available online at: <https://de-statista-com.docweb.rz.uni-passau.de:2443/outlook/202/102/digitale-musik/europa>

<sup>154</sup> Mordor Intelligence (2019). GAMING MARKET - GROWTH, TRENDS, FORECASTS (2020 - 2025). Available online at: <https://www.mordorintelligence.com/industry-reports/global-games-market>

<sup>155</sup> Statista (2020j). Statista Digital Market Outlook. Digitale Musik. weltweit

<sup>156</sup> Statista (2020k). Statista Digital Market Outlook. Video-on-Demand. weltweit



they are usually downloaded on the respective reading devices and thus should not additionally benefit from cloud solutions.

Furthermore, **the increasing prevalence of smart devices, facilitating access to, and the desire and ability to access cross-border content (speakers, streaming sticks, in-car entertainment, etc.) is expected to have both direct and indirect effects on reliance upon the Portability Regulation.** The compactness and simplified usability of the devices and the fact that they are readily available, as in the case of in-car entertainment, suggest that they are very easy to use when travelling abroad. Thus, access to all types of online and streaming services or cloud content is possible anytime and anywhere. In addition, these types of devices will likely lead to a higher demand for digital services in general. The reasons presumably lie in their attractiveness, convenience, and, potentially, price reductions in comparison to former versions of the devices. For example, smart speaker devices and platforms, such as Amazon's Alexa or Google Assistant, seem to increase the demand for audio streaming since listeners who consume music in a rather casual fashion can be swiftly attracted to subscription music services<sup>157</sup>. Moreover, listening to music is the most popular use case for smart speakers, as numbers for the USA market suggest<sup>158</sup>. It has been found that users of those devices listen to more audio content than they did before they had them. According to one media research company, 34% of owners of Amazon and Google devices, compared to only 24% of the general population, spend more than four hours a day listening to music, and almost half of these smart-speaker owners are also subscribers to a music streaming service.<sup>159</sup> Streaming stick technology and the cloud-based gaming sector presumably face similar developments, while being even more portable than the currently available smart speakers.

Finally, social influence in general and influence via social media in particular, have early and repeatedly been shown to have positive effects on the diffusion of diverse products and services (Rogers 1962).<sup>160</sup> In line with this ample evidence, video streaming and online gaming have also shown to be influenced by social media in a positive way. A recent study by Bankov (2019) concludes, for example, that social interaction among gamers offline and online is one of the driving forces of the growth of the video gaming industry and that gaming communities are strongly tied to the use of social media platforms.<sup>161</sup> In the context of video streaming, a study by Nam, Manchanda, and Chintagunta (2010) shows that electronic Word-Of-Mouth (eWOM) on social networking sites affects customer acquisition for a video-on-demand service.<sup>162</sup> A recent study by Köster, Matt, and Hess (2020) supports and extends these findings by showing the positive effects of referrals via social media on video-on-demand usage and the likelihood to also refer to the video-on-demand platform via social media.<sup>163</sup> Given that the use of social media is actually still increasing – the number of daily active users of Facebook in the EU has almost doubled since 2013 to 305 m in 2020,<sup>164</sup> the number of monthly active Instagram users will grow from 713 m worldwide in 2018 to 989 m in 2022<sup>165</sup>, and the number of daily active users of Snapchat in the EU (71 m) is now about

<sup>157</sup> Music Ally (2018): Everybody's Talkin'. Smart Speakers and their impact on music consumption. Available online at: <https://musically.com/wp-content/uploads/2018/03/SmartSpeakersFinal.pdf>

<sup>158</sup> Statista (2019): Smart speaker use case frequency in the United States as of January 2019. Available online at: <https://www.statista.com/statistics/994696/united-states-sm>

<sup>159</sup> Bridge Ratings (2019): Smart Speakers & Music Consumption. Available online at: <https://www.bridgeratings.com/smart-speakers-to-drive-music-consumption>

<sup>160</sup> Rogers, E. M. (1962). Diffusion of innovations. New York: Free Press.

<sup>161</sup> Bankov (2019): The Impact of Social Media on Video Game Communities and the Gaming Industry. Online available at: <https://www.researchgate.net/publication/337144821>

<sup>162</sup> Nam, Manchanda & Chintagunta (2010): The Effect of Signal Quality and Contiguous Word of Mouth on Customer Acquisition for a Video-on-Demand Service. Marketing Science Vol. 29, No.4

<sup>163</sup> Köster, Matt and Hess (2020): Do All Roads Lead to Rome? Exploring the Relationship Between Social Referrals, Referral Propensity and Stickiness to Video-on-Demand Websites. Available online at: <https://doi.org/10.1007/s12599-020-00660-1>

<sup>164</sup> Statista (2020): Anzahl der Daily Active Users (DAUs) von Facebook nach Regionen weltweit vom 1. Quartal 2013 bis zum 2. Quartal 2020. Available online at: <https://de.statista.com/statistik/daten/studie/481098/umfrage/taeglich-aktive-facebook-nutzer-nach-regionen-weltweit/>

<sup>165</sup> Statista (2018): Prognose zur Anzahl der monatlich aktiven Nutzer von Instagram weltweit für die Jahre 2018 bis 2022. Available online at: <https://de.statista.com/statistik/daten/studie/795086/umfrage/anzahl-der-nutzer-von-instagram-weltweit/>

twelve times as high as in 2014<sup>166</sup> - also, video streaming and online gaming will continue to gain importance, which is actually in line with market forecasts. **In addition to the general positive effect on demand for digital services, social media also has the potential to influence the demand for digital services among travellers.** Studies consistently show that more than two thirds of travellers use social media while on vacation<sup>167</sup>. The usage of social media is also high on business trips<sup>168</sup>. Thus, digital service providers have the opportunity to also reach and engage their users over social media while they are travelling and thus, social media will increase the demand for cross-border usage.

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<sup>166</sup> Statista (2020m): Anzahl der täglich aktiven Nutzer von Snapchat nach Regionen weltweit vom 1. Quartal 2014 bis zum 2. Quartal 2020. Available online at: <https://de.statista.com/statistik/daten/studie/553714/umfrage/anzahl-der-taeglich-aktiven-snapchat-nutzer-nach-regionen/>

<sup>167</sup> Martech.zone (2018): Statistics on How Travellers Utilize Social Media Before, During, and After a Vacation. Available online at: <https://martech.zone/social-media-statistics-travel-vacation/>

<sup>168</sup> Statista (2019): Welche Kanäle werden von Ihnen wie häufig auf einer Geschäftsreise gecheckt und bedient - sei es privat oder dienstlich? Available online at: <https://de.statista.com/statistik/daten/studie/961702/umfrage/umfrage-zur-haeufigkeit-genutzter-kanale-auf-geschaeftsreisen-der-deutschen/>

## 2.2. Application and impact of the Portability Regulation from the perspective of service providers

This chapter corresponds to Task 2 and a part of Task 4 of this Study. The main objectives of these tasks are to collect data and assess how the rules of the Portability Regulation are implemented by service providers, the impact of the Portability Regulation on service providers and the practical impact of the Portability Regulation on consumers.

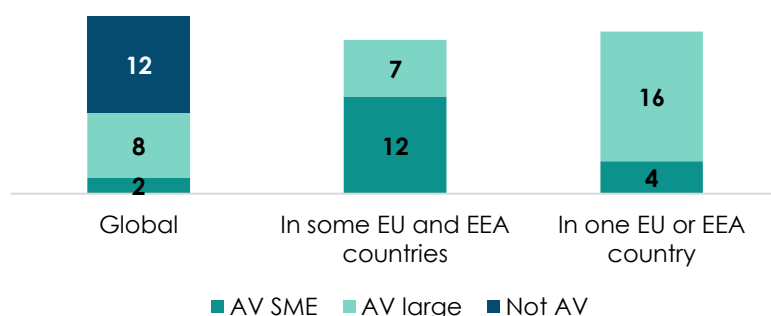
This chapter presents the results from the survey and interviews with service providers and the mystery shopping exercise. We received 62 survey responses, implemented 38 interviews with online content service providers and tested 39 service providers during the mystery shopping exercise (see more details in Annexes 2 and 3).

The application of the Regulation was expected to differ by sector, size or geographical coverage of the service provider. The highest impact was expected on the audiovisual and sports sectors, while impact on the music, e-book and game sectors was expected to be limited, as most of them already ensured cross-border portability for their consumers before the introduction of the Regulation<sup>169</sup>. Hence, for purposes of our analysis we broke the data down into three main categories as follows:

- Audiovisual and sports sector service providers (since these services are usually provided together) *versus* service providers offering any of the following services: music, podcasts, e-books, audiobooks and game<sup>170</sup> (but not offering these services together with audiovisual/sports services).
- SME *versus* large companies.
- Service providers offering services in the entire EU (including global service providers) *versus* service providers offering their services in one or more EU countries. Just because a company is large does not necessarily mean that it offers services in the entire EU. In fact, all surveyed music, e-book and game service providers (both large companies and SMEs) currently offer their services in all EU countries. In the audiovisual and sports sectors large companies usually offer services either in the entire EU or in just one EU country, while SMEs usually offer their services in some EU countries. More details are presented in Figure 11.

We have reported breakdowns only where we have found significant differences between the service provider groups.

**Figure 11. Sample of the surveyed service providers by size and geographic coverage**



Note: N=61.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

<sup>169</sup>European Commission (2015). Impact assessment: Proposal for a Regulation of the European Parliament and of the Council to ensure the cross-border portability of online content services in the internal market. COM(2015) 627 final, SWD(2015) 271 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2015%3A0270%3AFIN>

<sup>170</sup> These sectors were grouped because too limited of a number of responses was received to analyse each of these sectors separately. In addition, as previously mentioned, most of the service providers in these sectors ensured cross-border portability to their consumers before the introduction of the Portability Regulation, thus the impact of the Portability Regulation on them was expected to be lower compared to the audiovisual and sports sector service providers.

This study covers both subscription-based and transactional services. These categories were not analysed separately as transactional services are very often (in 23 out of 26 cases covered by this study) provided together with subscription-based services.

In order to assess how the Portability Regulation rules are implemented by the service providers we analysed the following:

- How service providers verify the Member State of residence
- Possible conditions and limitations applied to cross-border portability by service providers
- Application of the Regulation by free-of-charge service providers
- Information on the cross-border portability service that providers provide to consumers
- How service providers ensure cross-border portability when their service is provided through service by a third party
- Statistics about the actual use of cross-border portability by consumers
- Possible challenges and costs related to the application of the Regulation
- Impact of the Regulation on consumers and the way service providers operate

### ***2.2.1. How is a subscriber's Member State of residence verified? Are the means used reasonable, proportionate and effective?***

The Portability Regulation (Article 5) obliges service providers to use reasonable, proportionate and effective means for verification of the Member State of residence. Service providers have to comply with the following provisions:

- Use only the means listed in the Regulation<sup>171</sup>.
- Rely on a maximum of two means of verification.
- Use verification means (i), (j), (k)<sup>172</sup> only in combination with one of the other means of verification.
- If possible, rely on information that is in the provider's possession, and not to collect any additional information with regard to verification.
- Data collected for the purpose of verification can be stored only for the time period necessary to complete verification. After verification is complete, the service provider should immediately and irreversibly destroy the data. The data collected for verification may not be disclosed to third parties and in particular to rightholders; it cannot be rededicated in any way. These provisions do not concern data that was collected for some other legitimate purpose.
- Service providers are allowed to collect data on the Member State of residence only during the conclusion and/or the renewal of a contract. Any additional checks should be justified by

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<sup>171</sup> Verification of the MS of a residence means: a) Asking the subscriber to provide an identity card, using electronic means of identification or any other valid identity document confirming the subscriber's Member State of residence; b) Using payment details such as the bank account or credit/debit card number; c) Using the place of installation of a set top box, a decoder or a similar device used for supply of services to the subscriber; d) Using the subscriber's payment details for other services provided in the Member State, such as public service broadcasting; e) Using an internet or telephone service supply contract or any similar type of contract linking the subscriber to the Member State; f) Using data about registration on local electoral rolls, if the information concerned is publicly available; g) Using data about the payment of local taxes, if the information concerned is publicly available; h) Using data about a utility bill of the subscriber linking the subscriber to the Member State; i) Using the billing address or the postal address of the subscriber; j) Asking for a declaration confirming the subscriber's address in the Member State; k) Perform an internet protocol (IP) address check to identify the Member State where the subscriber accesses the online content service.

<sup>172</sup> (i) - the billing address or the postal address of the subscriber; (j) - a declaration by the subscriber confirming the subscriber's address in the Member State; (k) - an internet protocol (IP) address check to identify the Member State where the subscriber accesses the online content service.

a reasonable doubt regarding the Member State of residence of an individual subscriber. Reasonable doubt is in cases when the service provider has factual information to doubt the subscriber's Member State of residence (e.g. when a subscriber changes their payment means to a credit card or an account was issued or registered in a different Member State<sup>173</sup>).

- IP address checks should not collect the precise location of the subscriber, but rather the Member State in which the subscriber is accessing the service. This should only be collected in a binary format.

This section presents the data collected during the service providers' survey and interviews on the most common means used by service providers to verify a consumer's Member State of residence and the main reasons why some means are chosen over others. It analyses whether these means are sufficient to accurately verify the Member State of residence of the consumer. In addition, we present circumstances under which reasonable doubts about the Member State of residence arises for service providers.

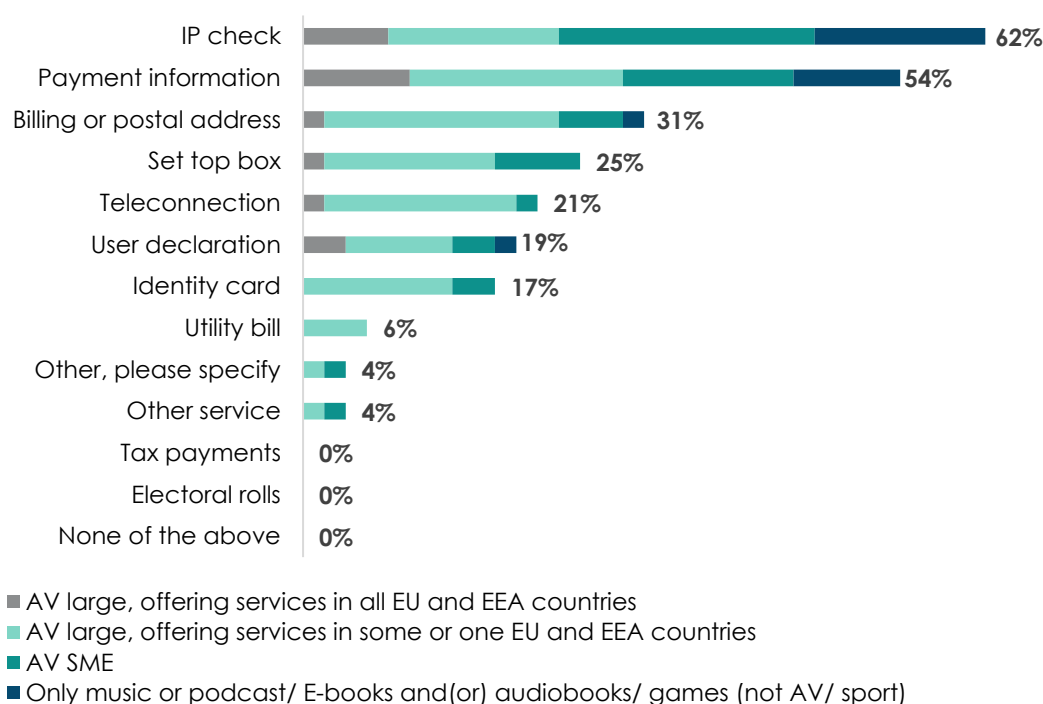
**The most common means to verify the Member State of residence are the IP address and payment details.** This is supported by both survey results that show that more than half of the surveyed service providers use these means to verify the Member State of residence (see Figure 12 below) and by the results of the mystery shopping exercise, where the majority of 34 analysed service providers required billing information to register. The main reasons behind the popularity of these measures are as follows:

- This information was already in the service providers' possession prior to the Regulation (e.g. they were already collecting payment detail information and are now using it to also verify a consumer's Member State of residence). The main goal of service providers was to avoid collecting additional and a disproportionate amount of information and to make the verification process as smooth and seamless for the consumer as possible.
- Payment details and IP addresses are seen as robust, reliable and the most objective means that are able to provide realistic information out of the range of means offered in the Regulation. For example, it is difficult to obtain false payment details and it would be logical for the resident of a country to have a bank account based there (however, consumers might have their residence in one Member State and a bank account in another Member State, thus some service providers reported ways of dealing with these situations (see Box 4)). The IP address provides data about the actual location of the consumer while also being easy to implement.

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<sup>173</sup> <https://www.jipitec.eu/issues/jipitec-9-2-2018/4728>



**Figure 12. Member State of residence verification means used by service providers**

Notes: 1) N=52 (43 AV, 9 not AV). 2) AV – audiovisual or sports sector. 3) Other responses include smartphone number (mentioned two times). 4) These abbreviated means correspond to the following verification means from the Regulation: Identity card – an identity card, any other valid identity document, or using electronic means of identification (e.g. eIDAS solutions); Payment information - payment details such as the bank account or credit/debit card number; Set top box - the place of installation of a set top box, a decoder or a similar device used to supply services to the user; Other service - payment by the user of a licence fee for other services provided in the Member State, such as public service broadcasting; Teleconnection - an internet or telephone service supply contract or any similar type of contract; Electoral rolls - registration on local electoral rolls that is publicly available; Tax payments - payment of local taxes that is publicly available; Utility bill - a utility bill of the user; Billing or postal address - the billing address or the postal address of the user; User declaration - a declaration by the user confirming the user's address; IP check - an internet protocol (IP) address check to identify the Member State where the user accesses the online content service.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

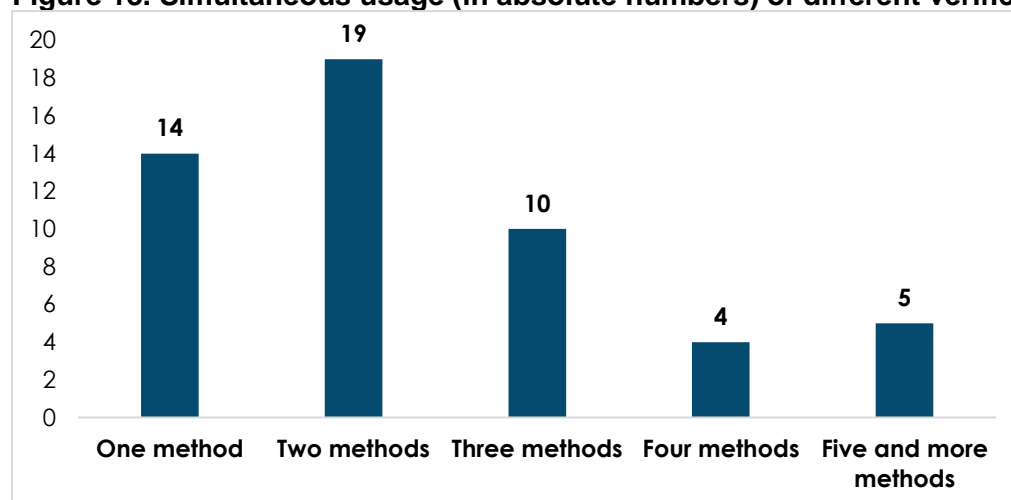
Some of the other means listed in the Portability Regulation are also used, mostly by large audiovisual/sports sector service providers offering services in one or some EU countries<sup>174</sup> (see more details in Figure 12). **These means are usually used together with the IP address and payment details** (only nine surveyed service providers use neither the IP address nor the payment details). In addition, interview data suggest that these means were also in the possession of some service providers prior to the Regulation, thus they continued to use them after the Regulation was introduced. Furthermore, some service providers collect different data from different consumers based on the services that they use. This data is originally collected for non-verification purposes. Since service providers already have this data, they use it for verification of the Member State of residence, thus customising the verification means for each consumer, so that they would not need

<sup>174</sup> **An identity card, any other valid identity document, or using an electronic means of identification** (e.g. eIDAS solutions) (78% of the service providers that use this means are large audiovisual/sports sector service providers offering services in one or more EU countries). **The place of installation of a set top box, a decoder or a similar device used for the supply of services to the user** (62% of the service providers that use this means are large audiovisual/sports sector service providers offering services in one or some EU countries). **An internet or telephone service supply contract or any similar type of contract** (82% of the service providers that use this means are large audiovisual/sports sector service providers offering services in one or some EU countries). **The billing address or the postal address of the user** (69% of service providers that use this means are large audiovisual/sports sector service providers offering services in one or more EU countries). **A declaration by the user confirming the user's address** (50% of the service providers that use this means are large audiovisual/sports sector service providers offering services in one or some EU countries).

to request additional data. Finally, two service providers mentioned that they use telephone numbers to verify the Member State of residence, although this means is not listed in the Regulation.

37% of surveyed service providers (19 respondents) have more than two verification means in their possession (see Figure 13). However, as seen in the example above, these means might be customised to different consumers, thus this does not necessarily imply that these service providers use more than two means to verify the Member State of residence of a single consumer. Figure 14 below shows the most popular means used in combination with IP checks. The most popular combination of means is an IP address and payment information details.

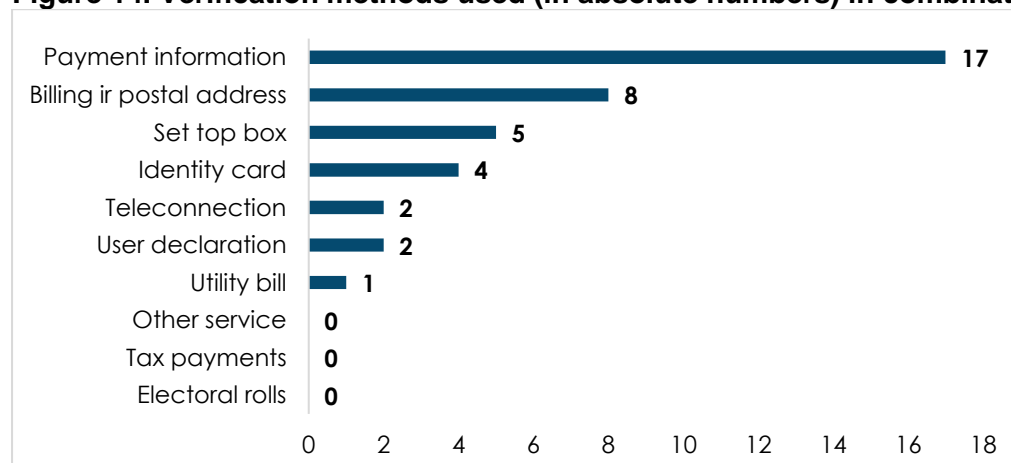
**Figure 13. Simultaneous usage (in absolute numbers) of different verification methods**



Note: N=52.

Source: Survey of online service providers

**Figure 14. Verification methods used (in absolute numbers) in combination with IP checks**



Note: N=32.

Source: Survey of online service providers

We identified **three cases when rightholders authorised service providers in the music, game and audiovisual sectors to offer cross-border portability without verification of the Member State of residence** (this possibility is foreseen in Article 5(4) of the Portability Regulation). This was done by the rightholders that have only worldwide contracts, so territoriality is not an issue for them or by the holders of the rights of local content that believe that the more access is provided to their content the better. In one of these cases, the service provider does not verify a consumer's Member State of residence. However, the other two service providers deal with many rightholders and only some of the rightholders authorised them to offer cross-border portability without verifying the Member State of residence. Hence, they still have to verify the Member State of residence as the verification is carried out per service, regardless of which specific content the subscribers are accessing.

The Portability Regulation requires the use of certain verification means (i), (j), (k)<sup>175</sup> (Article 5(1)), only in combination with one of the other verification means. Nevertheless, according to the information collected in the context of this study, five surveyed service providers only use the (k) IP address and two surveyed service providers only use the (j) declaration by the user confirming the user's address to verify the Member State of residence. None of them have indicated that they have an authorisation from rightholders to offer cross-border portability without verifying the Member State of residence. Some of these service providers noted that using only the IP address allows them to offer their services without requiring users to log in.

**The general consensus of the interviewed service providers is that the verification of the Member State of residence means defined in the Regulation are sufficient.** The main arguments behind this are as follows:

- The majority of the interviewed service providers have not identified or have identified very few abuses or attempts to circumvent the verification of the Member State of residence. However, service providers are aware that the means are not 100% reliable and can be abused, for example by using a VPN (see more details about the abuses faced by service providers below). However, service providers believe that the abuses are exceptions, rather than the norm, and the current means are perceived to be proportional and sufficient.
- Service providers that offer the same content worldwide or offer country-specific content (e.g. content in the national language) believe that there are no incentives for abuse, thus, they believe the means are sufficient.
- Service providers using the place of installation of a set top box, a decoder or a similar device to verify a consumer's Member State of residence find this measure to be very reliable and robust. As a set top box or a similar device is delivered to the consumer's actual address and needs to be installed (by the consumer or the employee of the service provider), the Member State of residence cannot be easily circumvented.

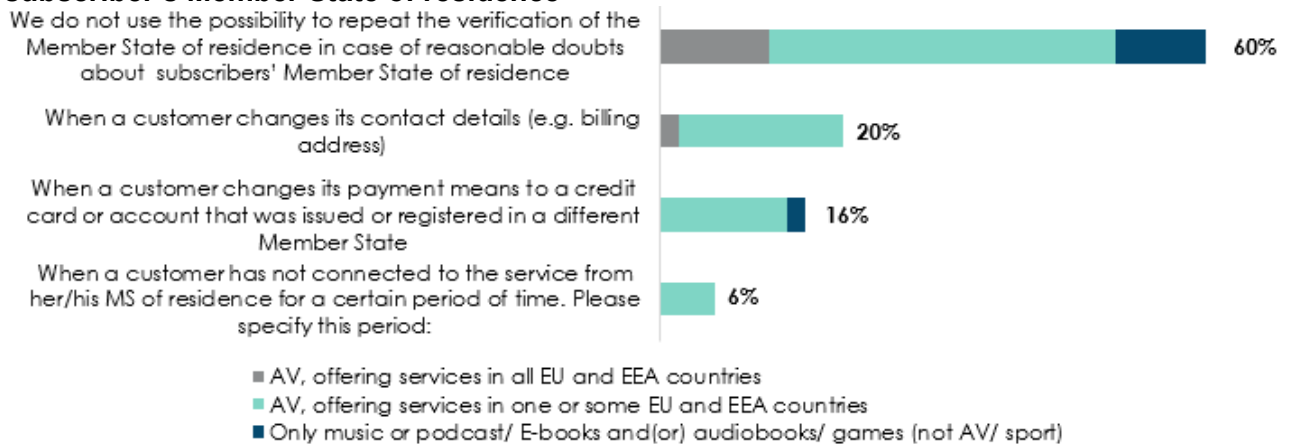
However, some service providers reported that they would prefer to use more means (four instead of two) and to use them more regularly. They consider that this would ensure more safety (e.g. it would allow building an automatic monitoring system and provide more accurate information). This was also highlighted by some rightholders that thought that the means listed in the Regulation are insufficient (see chapter 2.4).

**The majority of surveyed service providers do not make use of the possibility to repeat the verification of the Member State of residence in cases of reasonable doubt** (see Figure 15). In fact, most of the surveyed service providers in the music, e-books and game sectors (71%) and the audiovisual/sports sector service providers offering services in the entire EU (75%) do not make use of the possibility to repeat the verification in cases of reasonable doubt. Reasonable doubt is mostly used by the surveyed audiovisual/sports sector service providers offering services in one or more EU countries (46% of them use reasonable doubt). The ones that apply the notion of reasonable doubt use it when a consumer changes their contact details (e.g. billing address) or payment means to a credit card or account that was issued or registered in a different Member State or when a consumer has not connected to the service from her/his Member State of residence for a certain period of time (the time period specified by one service provider was 37 days, two service providers specified this period as four months).

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<sup>175</sup> (i) - the billing address or the postal address of the subscriber; (j) - a declaration by the subscriber confirming the subscriber's address in the Member State; (k) - an internet protocol (IP) address check to identify the Member State where the subscriber accesses the online content service

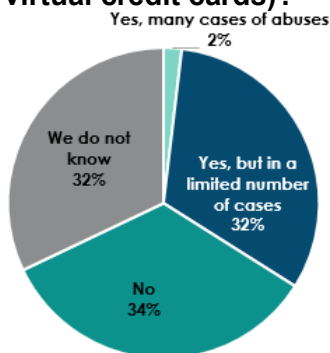
**Figure 15. Circumstances in which service providers raise reasonable doubt about a subscriber’s Member State of residence**



Notes: 1) N=50 (43 AV, 7 not AV). 2) AV – audiovisual or sports sector. Not AV – service providers providing any of the following, but not AV or sports: music, podcasts, e-books, audiobooks and games.  
Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

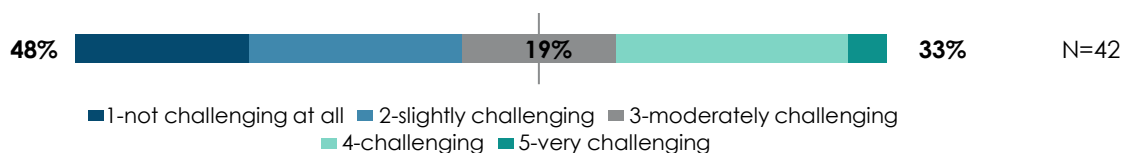
**The surveyed service providers face and are aware of possible abuses when users try to access content intended for residents of another Member State, but the scale of these abuses is limited.** About two-thirds of the surveyed service providers either have not encountered or did not know about any abuses, while a third of services providers reported that they encountered a limited number of abuses (see more details in Figure 16). In addition, 33% of surveyed service providers think that dealing with abuses is challenging or very challenging, while 48% think it is slightly challenging or not challenging at all (see more details in Figure 17). Some service providers have not yet encountered any abuses but expect that it might become a problem in the future, thus they rated dealing with abuses as challenging. They did not provide any reasons as to why this might become a problem.

**Figure 16. Responses to the survey question “Q15. Has the service provider that you represent encountered any abuses when users try to access content intended for other Member State residents (e.g. by faking a location, using a virtual private network (VPN), virtual credit cards)?”**



Note: N=53  
Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Figure 17. Respondents' opinion about the statement “Dealing with possible abuses of the portability rules“ in the survey question “Q22. What do you, as an expert of the online content industry, think is the most challenging while applying the Portability Regulation?”**



Note: N=42 (excluding 8 respondents that answered „I don’t know/ can’t answer“)  
Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

Service providers reported facing the following types of abuses:

- Consumers sometimes use a VPN to hide their real location. Some service providers use third-party services to identify and block access through VPNs (e.g. Neustar, MaxMind) or rely on in-house IP checks (e.g. if a service provider sees that there are a lot of people using the same IP address, it flags that as a possibly VPN-related issue and the issue is further investigated by an appropriate team) to deal with this issue. In addition, most service providers use more than one verification means and do not rely only on an IP address. Box 4 below presents possible ways to deal with VPN related abuses from a technical point of view. One service provider mentioned that rightholders insisted that a tool to block VPN access be used. Since this service provider faces only a very limited number of such abuses, they think that such a request is disproportionate and too costly for them (they have to pay a subscription fee to the VPN blocking service on a monthly basis).
- Service providers that use a person's identity card for verification noted very rare cases when expired cards could also be used for verification. They are currently working on fixing this issue.

Two service providers noticed consumers still using their services after moving to another Member State. One service provider does not have any system to prevent or track this and found out about this by chance (e.g. a consumer complained about problems with a system, and they realised that the consumer is not living in his original Member State of residence anymore). The other service provider does not have a clear system and rules to identify consumers who have moved abroad. It has not defined a specific duration during which the consumer can use cross-border portability abroad and considers possible changes of a consumer's Member State of residence on a case-by-case basis (e.g. when a consumer accesses services from abroad for a longer time than usual). If the service provider believes that the consumer's Member State of residence changed, they block the access to their service in order to avoid breaching their agreements with rightholders. They then inform consumers as to why the service was disabled. Sometimes consumers explain the situation and can continue using the service, but in most cases consumers do not respond. The service provider speculates that these consumers are aware of using the service illegally and do not complain about the disabled service. The line between moving and being temporary present in another Member State is not clear to some service providers, as the Regulation does not define the duration of temporary presence in another Member State.

- One service provider noted that it is possible to register and pay for services outside of the countries where the services are available by using a gift card. These gift cards can be bought anywhere in the world. It would be possible to prevent people from buying gift cards, but as cases of this type of misuse are marginal, the service provider is not planning to do that.
- One service provider noticed that its content became available illegally on third-party services (e.g. YouTube). To counter this, the service provider created a feature on the application that does not allow screen recording. In addition, it started partnerships with these third parties and introduced content ID that helps to identify pirated content.



#### Box 4. Case study about abuses and ways to deal with them

Providers of audiovisual digital content services (e.g. Netflix, HBO) experience subscribers that access content intended for residents of other Member States. Subscribers do this by faking their actual location using various techniques. This issue is of interest to the audio-visual online content service providers (hereinafter service providers) and especially to rightholders in order to safeguard them from such abuses. This case study aims to discuss the ways customers try to abuse service providers by accessing content not intended for them, how service providers try to guard against these abuses and which safeguard techniques are the most effective.

Subscribers may try to fake their actual location to gain access to digital content, which they have no contractual right to access. This can be achieved by using a VPN service. The VPN service allows a subscriber to appear to the service provider as if she/he is in another location (country<sup>176</sup>) than in reality.

Service providers typically react (if they react) to this by blocking traffic that they detect as coming from a VPN. Service providers can detect the use of VPNs by three means:

- IP blacklisting: VPN grouping and blacklisting of unauthorised IP addresses (e.g. used by Netflix).
- Port blocking: blocking of certain ports in the IP traffic that are used for VPN protocols (e.g. used by BBC iPlayer, Hulu).
- Cryptographic signatures search: inspecting IP packets and looking for cryptographic signatures that are used by VPN protocols (e.g. applied by Neustar, MaxMind IP services).

Service providers may set up the above means of detection in their firewalls or buy them as a third-party service that will check the IP-address of the user before signing them up for a service or while using the service. It is possible to mask VPN usage. Some VPN providers<sup>177</sup> market their VPN services as being obfuscated (hiding the fact that a VPN is used), which enables the user to bypass the VPN blocking being undertaken by content service providers.

Another technique exists to determine the geolocation of a client. This technique uses the ping and traceroute protocols of the IP standard to estimate the geolocation of a client request by measuring the network hops and the time it takes to respond to an ICMP (Internet Control Message Protocol<sup>178</sup>) message. The study team has not found any evidence of the use of this technique. The complexity and effort of undertaking this is too high for determining the Member State of residence and goes against the intention of the Portability Regulation (see recital 28 of Regulation 2017/1128). As with VPN detection, countermeasures exist for deceiving the delay-based IP geolocation technique<sup>179</sup>.

To conclude, it is not possible for a service provider to provide 100% protection against the usage of a service from a different location than the one allowed for in the subscription contract. Nevertheless, the VPN-detection methods mentioned above may still be used by online content service providers to better protect against abuses and thus comply with their contractual agreements with rightholders, which may include limitations on geography.

Source: Authors' own elaboration based on the sources referenced in the Box.

#### 2.2.2. What are possible conditions or limitations applied to cross-border portability?

Article 3 of the Portability Regulation requires online content services provided against payment of money to enable a subscriber who is temporarily present<sup>180</sup> in another Member State to access and use the online content service in the same manner as in the Member State of residence. This includes providing access to the same content, on the same range and number of devices, for the same number of users and with the same range of functionalities. This obligation does not extend

<sup>176</sup> The assignment of IP address ranges is regulated by geography and coordinated by IANA (Internet Assigned Numbers Authority) (See: [IANA — Number Resources](#))

<sup>177</sup> See e.g. <https://www.cactusvpn.com/features/>

<sup>178</sup> <https://tools.ietf.org/html/rfc792>

<sup>179</sup> [TR-14-03 Abdou.pdf \(carleton.ca\)](#)

<sup>180</sup> According to Article 2(4) of the Portability Regulation, 'temporarily present in a Member State' means being present in a Member State other than the Member State of residence for a limited period of time.

to providing services at the same quality under cross-border portability as in the Member State of residence. In addition, service providers shall not impose any additional charges on the subscriber. We tested how these provisions are applied by implementing a mystery shopping exercise and complemented its results with data collected during the surveys and interviews.

In general, **the results of the study show that the overwhelming majority of surveyed service providers comply with the Portability Regulation and have not faced many challenges while applying it.** The mystery shopping exercise results show that with some exceptions all service providers tested ensured the cross-border portability of their services. The survey and interview results show that over 80% of service providers have not received any complaints related to cross-border portability. The ones that did receive complaints reported receiving them at the early stages of the Regulation implementation. In addition, there were a limited number of complaints about the verification of the Member State of residence, unavailability of services from other EU/EEA countries and other issues received (see more details about these complaints in Box 5). Service providers do not find dealing with complaints challenging (only 9% of service providers rated this as challenging), as this is one of their regular tasks as service providers. The remaining paragraphs of this chapter present the identified limitations to cross-border portability. As mentioned earlier, these limitations are exceptions rather than the norm.

### **Box 5. Examples of complaints related to cross-border portability received by service providers**

**Issues with verification of the Member State of residence** (reported 4 times (8% of surveyed service providers)):

- Consumers were not able to use cross-border portability, as the service provider allows this feature only for consumers whose payment details are linked to a bank of the country where services are provided. The service provider explained this to its consumers and allowed them to use cross-border portability after verifying their Member State of residence through other means. Some other service providers noted that if the consumer has a bank account in another Member State, they use other means of verification (preferring the verification via set top box or modem).

**Unavailability of the online services when accessing from another EU/EEA country** (reported 3 times (6% of surveyed service providers)):

- Consumers were not able to access content abroad. This was because of a technological error that was fixed.
- Consumers were not allowed to access services as they used a VPN (some people use a VPN for security reasons). Service providers dealt with these issues on a case-by-case basis. They whitelist (or ask their third party to whitelist) the IP of a consumer if he/she can verify the Member State of residence by other means (e.g. ID card).
- Consumers of free of charge services could not access the same content from other Member States. The customer support department explained to them that under the Portability Regulation offering cross-border portability is not mandatory for free-of-charge service providers.

**Problems with the quality or speed of online services** (reported 2 (4% of surveyed service providers)):

- Consumers experienced problems with quality and speed when they were travelling, which were the result of poor connections or problems with roaming. The customer support department explained that this was related to the poor connection of a consumer and that the service provider could not do anything about it.

**Other complaints:**

- Consumers cannot access content when temporarily staying in the UK (reported by two service providers). This was after Brexit, thus the service provider informed the consumer about the legal situation regarding Brexit.
- Consumers who have recently moved complained about not being able to access the catalogue of their new country immediately.

Source: Service providers' survey and interviews.

The Portability Regulation defines temporary presence as a state of being present in a Member State other than the Member State of residence for a limited period of time (Article 2(4)). However, the limited period of time is not defined and, as a result, cross-border portability is not limited to a specific time period (Article 7(1)). The Regulation is intended to cover not only leisure, travel and business trips, but also learning mobility<sup>181</sup> (e.g. under the Erasmus programme), which usually takes an extended period of time. **The majority of service providers do not have time limitations for temporary presence in another Member State.** We have not come across any time limitations after testing 39 online content services under cross-border portability for 9 weeks during the mystery shopping exercise. In addition, most of the surveyed and interviewed respondents reported that they do not apply any time limits to using cross-border portability. However, we identified 10 service providers (from the audiovisual, sports and music segments) that do limit the time of temporary presence abroad or plan to do so in the future (see more details about these limitations in Box 6).

### Box 6. Case study about service providers limiting the duration of temporary presence in another Member State

This case study presents examples of how service providers limit the duration of temporary presence abroad. Although the intention of the Portability Regulation is to allow portability for all forms of temporary presence (e.g. leisure, travel, business trips, learning mobility) and the European Commission recommends service providers not to limit cross-border portability to a specific time period<sup>182</sup>, we have identified 10 service providers that do limit the time of temporary presence abroad or are planning to do so in the future. They are interpreting the notion of temporary presence in the following ways:

- Service provider A offers both free and paid services. There are no time limits for using services abroad for consumers who pay a subscription fee. Consumers using free services have a 14 day time limit for using services under cross-border portability. After 14 days, the consumer either cannot access the services anymore or has to change his/her Member State of residence in the settings. This information is provided to all consumers on the support page.
- Service provider B limits the time for using their services in other Member States to a month. If the consumer has not logged-in from the Member State of residence for 30 days, the service provider no longer allows the consumer to access their services from another Member State.
- Service provider C informs the consumer by email after 30 days abroad and invites him/her to use the service in their Member State of residence within 7 days to confirm that the Member State of residence is still the same. After these 7 days (37 days of temporary presence abroad in total) the content will not be available from other Member States. This information is provided to all consumers on the support page. However, during our mystery shopping exercise, we could not verify this limitation (see Annex 3).
- Service provider D allows cross-border portability for 60 days. This number was selected in the context of other regulations (such as the Roaming Regulation). They have defined this time in a broader context of other regulations and billing periods.
- Service provider E defines temporary presence as being abroad for up to three months, from the first log-in outside the Member State of residence. After these three months, they re-verify the Member State of residence.
- Service provider F considers temporary presence as a time when the user is in a Member State other than his or her own Member State of residence for up to 4 consecutive months.
- Service provider G has defined "temporary presence" as being abroad for up to a year. The count starts from the first log-in outside of the Member State of residence. After a year, the consumer has to log in back in the Member State of residence to continue accessing services.
- Service provider H mentioned that the time limit to use services abroad varies by content. This depends on the contracts with rightholders. The service provider does not specify the concrete time limits they have set.

<sup>181</sup> Recital 1 of the Portability Regulation

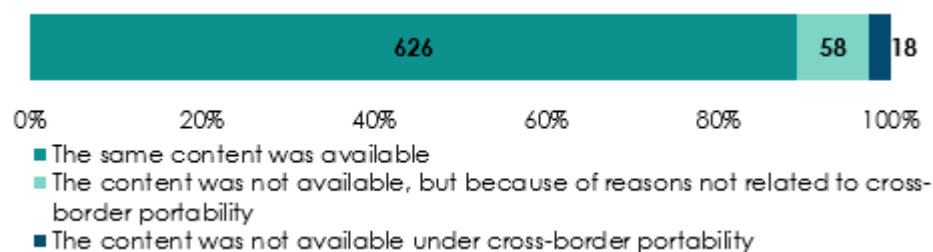
<sup>182</sup> European Commission (2018). Letter to the attention of the competent national authorities on the application of Regulation (EU) 2017/1128. Brussels.

- Service provider I limits the time consumers can access services in Member States other than the Member State of residence. However, the service provider considers this time limit confidential and cannot specify it. The time limit is included in its agreements with rightholders.
- Service provider J currently does not have any time limitation to use services abroad. However, they are planning to define a time limit in the future. The service provider has not decided on the exact time period yet. Service provider J decided to introduce a time limit to prevent any misuse of their services abroad. Currently, consumers from other countries could purchase their service, use it as being temporarily present abroad and take advantage of their offered TV packages. They believe that the current situation is contrary to their agreements with rightholders.

Source: Interviews with service providers and results of the mystery shopping exercise.

As mentioned above, the results of the mystery shopping exercise show that in most cases (89% of attempts) the same content was available under cross-border portability and in the Member State of residence (see Figure 18). All of the 18 attempts when the content was not available under cross-border portability were identified while testing one free-of-charge service provider (see more details in Annex 3).

**Figure 18. Availability of content under cross-border portability during attempts to access services**



Source: Authors' own elaboration based on the results of the mystery shopping exercise.

In addition, the mystery shopping exercise identified the following limitations to cross-border portability (see more details in Annex 3):

- Unavailability of content on particular devices (web browser on a computer), while ensuring cross-border portability on other devices (Android and iOS mobile devices). This was encountered while accessing services from one service provider (see Box 2 in Annex 3 for a more detailed example).
- Some service providers require consumers to enable the cross-border portability feature before using it. This can be done by verifying the consumer's address using a phone number (see more details in Box 3 in Annex 3). If this is not done, the cross-border portability feature is not provided. Two of the analysed service providers required users to enable cross-border portability while they were still present in the Member State of residence but have not properly informed consumers about the need to do this.
- One case of the unavailability of services because cross-border portability was not ensured (see Box 1 in Annex 3 for more details).

The mystery shopping exercise found **no differences both in terms of functionality** (e.g. subtitles, languages, formats available) **and in terms of the available quality** of service in the Member State of residence and the other Member States under cross-border portability. These findings are also supported by the interviews. All of the interviewed organisations have reported that they ensure the same quality of delivery when the consumer is under cross-border portability and quality-related differences might only be the result of differences in the internet infrastructure at the place of consumption.

It is important to note that service providers were selected for the mystery shopping exercise by prioritising service providers with the highest market share. Some evidence from the surveys and interviews suggests that **some small service providers are not always aware of the Portability Regulation and do not apply it** (e.g. they answered that they provide only the content of the country

where the consumer is accessing services, mentioned that they do not know much about the Portability Regulation and do not apply it). However, these service providers did not fall into the scope of the mystery shopping exercise, thus we cannot support this with the evidence from the mystery shopping exercise.

The European Commission's letter to the attention of competent national authorities on the application of the Portability Regulation recommends that service providers should not regularly track the location of consumers, as IP tracking of consumers is excluded by the Portability Regulation<sup>183</sup>. However, the way the internet (Transmission Control Protocol/Internet Protocol) (TCP/IP) works, the IP addresses of both consumer and service provider are visible. This means that the server log of the service provider will always include the IP address and it is technologically impossible not to collect such information. Hence, the important questions are whether service providers store the location data as well as for how long and how they use it. **Our limited evidence shows that service providers usually collect the geolocation of the consumer by using the means of IP addresses.** For example, most service providers ensure cross-border portability by using geo-blocking to restrict access from outside of the EU and the EEA. In addition, many global service providers redirect the customer to a website designed for a specific country. This implies that service providers check the location of the consumer each time he/she accesses their services. However, these checks can be performed in real time and they do not require storing the IP address for an extended period of time. Some service providers, mostly in the music, e-book and game sectors, have obtained licences in nearly every country of the world and are thus not concerned about cross-border portability as the same services are accessible all over the world. However, even in this case there might be some exceptions, due to certain specific exclusive rights agreements or legal issues (some content might be illegal in some countries). This implies that service providers do have to check the location of the consumer. In addition, service providers (and CDN providers) use location information about the user to serve content in the most efficient way. Only in a limited number of cases do service providers not track a subscribers' IP address at all or only check whether the consumer is in or outside of the European Union.

### **2.2.3. Do free-of-charge service providers offer portability?**

Article 3 of the Portability Regulation indicates that the scope of the Regulation is limited to online content services provided against payment. Nevertheless, Article 6 of the Portability Regulation stipulates that free-of-charge service providers may decide to enable cross-border portability feature for their subscribers. In this case, the service provider then has to verify the Member State of residence of a subscriber in accordance with the Regulation and inform the consumers and rightholders about the introduction of the cross-border portability feature.

Currently, the application of the Portability Regulation by free-of-charge service providers is not a widespread practice. Based on the 2019 European Audiovisual Observatory study<sup>184</sup> 13 out of 52 questioned free online video service providers had implemented (4 service providers), were working on implementation (2 service providers) or were considering adopting the Portability Regulation (7 service providers). We surveyed 11 free-of-charge service providers (providing only free-of-charge services<sup>185</sup>) for this study (at least five of these organisations were also covered by the 2019 European Audiovisual Observatory study). **Six of the eleven surveyed free-of-charge service providers apply (five respondents, three of them also covered by the 2019 European Audiovisual Observatory study<sup>186</sup>) or are considering applying (one respondent) the Portability Regulation.** We interviewed two of these five free-of-charge service providers that are

<sup>183</sup> European Commission (2018). Letter to the attention of the competent national authorities on the application of Regulation (EU) 2017/1128. Brussels.

<sup>184</sup> Jiménez Pumares, M. (2019). First feedback from the implementation of the Portability Regulation by free online video services. European Audiovisual Observatory (Council of Europe), Strasbourg. Available online at: <https://rm.coe.int/first-feedback-from-the-implementation-of-portability-regulation-by-fr/168095f331>

<sup>185</sup> Two of them provided services only in the music/e-books sectors. The remaining nine provided services in the audiovisual sector.

<sup>186</sup> One of the three surveyed service providers are not listed as providing or considering the provision of the cross-border portability feature in the 2019 European Audiovisual Observatory study.



currently applying the Portability Regulation. Both of these service providers are publicly funded broadcasters and they have both indicated that the provision of cross-border portability was a political decision taken at the government level.

### Box 7. Case study of how a Public Service Broadcaster offers cross-border portability

The Portability Regulation does not apply to free-of-charge services unless the service provider decides to opt-in to apply the Regulation. In this case, it needs to inform subscribers as well as the relevant rights holders of its decision to offer portability of its online content service. In many cases, free-of-charge service providers have not offered portability because they consider that the costs incurred by offering the portability feature outweigh the perceived benefits. This is particularly also true for online services offered by public service broadcasters given that in many countries, the funding of public service broadcasters is declining and that they are facing financial difficulties.<sup>187</sup> However, some public service broadcasters have decided to offer the cross-border portability of their online service; the argument being that their content, which is often funded by public money, should be made available in the widest possible way.

**Free-of-charge audiovisual service provider A** is mainly funded through a media licence that is paid by those that own a television set but also by all who own a computer, smartphone, or any other device enabling access to the internet. There was a clear political desire in the country where the service provider is based to apply cross-border portability and to allow citizens to benefit from national content when they travel to other Member States. Therefore, the Ministry of Culture encouraged the service provider to offer portability. Technical development and financial costs were quite significant for a period of around 6 months but the service provider managed to reach its objective of providing citizens with a high level of accessibility to its services.

**Free-of-charge audiovisual service provider B** has already been offering portability for 10 years. Before the adoption of such a feature (implemented before the Portability Regulation), *'the biggest challenge was to clear all the rights for the countries where portability would be offered. This was costly and required a lot of administrative work.'*

Source: Authors' own elaboration.

There are several reasons why free-of-charge service providers may choose not to opt-in to the Portability Regulation. Based on the survey results, the main reasons not to apply the Portability Regulation for free-of-charge service providers are **technological constraints** (e.g. the need to invest in a technological infrastructure) (two respondents marked as important and two as very important), **verification issues** (the need to implement a login space, inform the users and rightholders, privacy concerns) (two respondents marked as important and one as very important) and the **cost-benefit analysis** (e.g. the need to install login features, concerns about losing certain revenue, insignificant demand for portability) does not justify the application of the Portability Regulation (three respondents marked it as important). Interview results mirror these findings. Two out of three interviewed free-of-charge service providers are not considering applying the Regulation in the future. This is because neither of the service providers have the technological infrastructure and login systems required to verify the Member State of residence of the subscriber. In addition, most of the content of both of these organisations is available anywhere in Europe due to their licencing practices, which makes the relative benefit of applying the Regulation smaller. The third interviewed free-of-charge service provider considered applying the Regulation. The service provider had started the creation of a verification system, however, the financial and human resources-related costs were unexpectedly high, thus the process was discontinued. Nevertheless, the respondent is considering applying the Regulation in the future.

<sup>187</sup> <https://www.ebu.ch/news/2017/12/funding-of-public-service-media-2-new-reports>

### 2.2.4. What information are service providers providing to consumers on cross-border portability?

According to the Eurobarometer survey carried out early 2019<sup>188</sup>, about half of surveyed Europeans (52%) are aware of the right to cross-border portability of online content services. However, more than a third (36%) of people who answered that they knew about cross-border portability did not know exactly what the portability entails. This shows that although around half of the Europeans have heard about cross-border portability, they are not very familiar with how it actually works.

There is no legal obligation in the Portability Regulation for service providers to inform users about the cross-border portability feature (except for service providers who offer free of charge content and who decide to opt into portability). According to the data collected for this study, a large part of service providers provide information about the cross-border portability feature to their subscribers. **Around 65% of surveyed service providers** (84% of large companies and 62% of SMEs) **have informed their consumers about the introduction of the cross-border portability feature** (34 out of 52). A contract analysis (see more details in Annex 3) has indicated that less than 50% (16 out of 33 analysed) have informed their consumers about cross-border portability in their terms and conditions. The rest of the service providers may have used other channels of information (e.g. their website or email communication with the consumer).

In fact, the survey results show that the most popular channel for informing consumers of the cross-border portability feature was **providing this information on the website** (nearly 76% or 26 out of 34 surveyed respondents) (see an example in Box 8). The second most used form of communication of such information was **updates in contracts or terms and conditions** of the service provider (53%, 18 out of 34 surveyed respondents). As mentioned above, the contract analysis has found that less than 50% of analysed service providers have provided such information in their terms and conditions. Although 17 service providers do not provide information about cross-border portability in their terms and conditions, some of them (at least two) provide this information in the **frequently asked questions (FAQ) section** (however, terms and conditions do not refer to the FAQ in these cases) (see more details in Annex 3).

#### Box 8. Case study on how service providers inform users about cross-border portability

Although there is no express legal obligation in the Portability Regulation for service providers to inform users of the portability feature (except for service providers who offer free of charge content and who decide to opt into portability) a large majority of service providers do inform their users about the cross-border portability feature of their services. This information is given to users in a variety of ways including in contracts, through email and sometimes even through advertising campaigns on radio and television.

**Telia Lithuania** which offers a range of content through **Teliaplay** (<https://www.teliaplay.lt/>), including **HBO**, proactively informs its customers of the portability feature, thereby using portability as a sales pitch and marketing feature of its service.

As soon as the user visits the website or opens the mobile app, a banner is displayed highlighting the advantages of Teleplay, including the ability to enjoy the service throughout the European Union. Once the user is logged in, notifications are displayed, including one that reminds users that the service can be used in all member states with a link to the service's terms and conditions which describe all of the features of portability.

This way, users are well informed of the cross-border portability feature and at the same time, the service provider has understood that portability can also be a selling point of the service and translate the legal obligation into an advantage in their marketing strategy.

<sup>188</sup> Kantar Public (2019). Flash Eurobarometer 477a: Accessing content online and cross-border portability of online content services. Report prepared at the request of European Commission. Available online at: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

Source: Authors' own elaboration.

According to Article 3(4) of the Portability Regulation, service providers must inform their subscribers about the quality of delivery of online content services outside the Member State of residence based on the information available to the service provider. According to the portability rules, this information should be provided prior to providing services in another Member State. Half of the interview respondents (8 out of 16 who answered this question) indicated that **they inform their consumers about the differences in quality that could result from differences in the technological infrastructure in the country**. Importantly, interview respondents mentioned that they **do not provide different quality standards to their content when used in another Member State** than the one of their residence. Service providers have expressed that any potential differences that may arise would be the result of the delivery internet infrastructure (e.g. slow internet speed) and they could not have any impact on that. None of the interview respondents have been seeking information on technical infrastructure-related differences in countries across the EEA. In addition, one of the interview respondents indicated that they would not be able to obtain such information, as it is held as a commercial secret by internet service providers.

### ***2.2.5. How are service providers ensuring cross-border portability when their content is not provided to the consumer directly by them but through the service of a third party?***

The survey results show that about 20% of respondents offer their content through the service of a third party. This is practised by audiovisual, sports, e-books and music service providers. The results from the mystery shopping exercise (we tested three service providers that offer their content through a third party<sup>189</sup>) and interviews present some insights into how the content is provided. We have identified the following three models on how the content is provided through a third party:

- **By generating a link to register for a service directly** (e.g. GO3 through Tele2 in Lithuania and Disney+ and Netflix through Canal+ in France). In this case, the consumer buys services from a third party (usually in a bundle with other services) and then has to register on the service provider website/application through a special link without entering any payment details. After that, the consumer can access the online content services directly from a service provider's website or mobile/TV application. Only the payment is processed through the third party. Thus, the service provider and not the third party is still the main gatekeeper to accessing the service. The service provider conducts the verification of the Member State of residence (relying on all of the means that they normally use except for payment details) and is ensuring cross-border portability themselves. The only difference from providing services directly is that the consumer payments are managed by a third party. Hence, the interviewed service providers have not reported any challenges due to this arrangement, as they themselves are in control on how their services are provided.
- **By allowing consumers to buy a service provider's content from a TV set box (TV and/or Internet provider)**. In this case, the consumer buys or rents the service provider's content on a smart TV. In the cases that we analysed, the content bought could be accessed only from a smart TV. The consumer pays for these services together with the linear television bill. This model does not pose any challenges related to ensuring cross-border portability, as the TV set box is not considered to be a portable device<sup>190</sup>, but rather a stationary item that people do not take for a temporary stay in another country. The provision of services that relies exclusively on non-portable devices does not carry an obligation to ensure cross-border portability. In addition, the installation of a specific TV set up box is usually available only in the country where the services are provided.
- **By allowing a third party to acquire content from the service provider and include it in the catalogue of the third party** (e.g. HBO content offered through Telia in Lithuania). The content of the service provider is available under a separate category inside of a website or an application of the third party. Hence, the consumer does not have to register or access

<sup>189</sup> HBO through Telia Lithuania, GO3 through Tele2 Lithuania, Disney+ through Canalplus.

<sup>190</sup> European Commission (2018). Letter to the attention of the competent national authorities on the application of Regulation (EU) 2017/1128. Brussels.

the website or application of the service provider. In these cases, the third party acquires the necessary licences from the service provider/content owner. The third party offers this content in the same nature as any other content in their library, the only difference is that this content is grouped into one category and marketed separately. Thus, the third party is fully responsible for ensuring cross-border portability.

### 2.2.6. What is the actual use of cross-border portability by consumers?

According to the Eurobarometer survey<sup>191</sup> about a third (32%) of people who have subscriptions have tried to access their online content services while they were travelling or staying temporarily in another EU country. At the same time, considering the diversity of service providers and the fact that many people have more than one subscription, the share of consumers that use cross-border portability is necessarily smaller for each service provider. According to the information collected in the context of this study, it usually consists of less than 5% of the total subscribers of any given service provider. This shows that quite a significant share of European consumers use cross-border portability, but for many service providers these consumers comprise only a small share of their subscribers.

However, the share of subscribers using cross-border portability within the service providers might actually be a little higher, as music service providers did not provide data in the survey while such services are likely to be used abroad. In addition, the survey was carried out at a time when travel restrictions were in place. Furthermore, most of the service providers that provided data had up to 15 million subscribers and the only respondent with over 15 million subscribers reported that 20-44.9% of its subscribers used cross-border portability in 2019 (before travel restrictions were in place).

The evidence from the service providers' survey, in line with the Eurobarometer<sup>192</sup> survey<sup>193</sup>, shows that **consumers who use cross-border portability usually use it for a short period of time** (up to a week or less than 2-3 weeks) **and 2-5 times a year**. The service providers' survey results show that 70% of the surveyed service providers do not collect statistics about the use of cross-border portability. Based on the answers from the service providers that collect these statistics (16 responses from the audiovisual/sports sectors and one response from the e-book sector) we can make the following observations:

- The approximate share of consumers who regularly make use of cross-border portability is usually reported as being below 5% (reported by 67% or 10 respondents). In a limited number of cases it was reported at 5-9.9% (reported by one respondent), 10-19.9% (reported by two respondents) or 20-44.9% (reported by one global audiovisual service provider).
- Most of the service providers do not collect data about how often consumers make use of cross-border portability. A limited number of service providers (seven) reported that consumers use cross-border portability once a year or 2-5 times a year.
- Most of the service providers do not collect data about the average duration of cross-border portability. A limited number of service providers (six) reported that consumers use cross-border portability for one week or less or 2-3 weeks. One respondent reported that cross-border portability is used for 2-3 months.
- Additional information collected by service providers includes the share of streams from outside of the Member State of residence (one service provider reported 9% of such

<sup>191</sup> Kantar Public (2019). Flash Eurobarometer 477a: Accessing content online and cross-border portability of online content services. Report prepared at the request of European Commission. Available online at: <https://ec.europa.eu/comfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

<sup>192</sup> Kantar Public (2019). Flash Eurobarometer 477a: Accessing content online and cross-border portability of online content services. Report prepared at the request of European Commission. Available online at: <https://ec.europa.eu/comfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2221>

<sup>193</sup> None of the surveyed and interviewed consumer organisations and rightholders receive or collect data about the use of cross-border portability, thus no further evidence about this is available.

streams), the number of consumers who have activated the cross-border portability feature and the type of network or internet service provider used by the consumers.

According to the Eurobarometer survey, 29% of people who tried to access their online content services while they were travelling or staying temporarily in another EU country reported using portability several times and 20% using it once or twice. The longest period of using online content services while being abroad was one or two days (21% of respondents), up to a week (33%) or between a week and two weeks (24%). Less than 20% of respondents reported longer periods of using portability.

### **2.2.7. What are the possible challenges and costs related to the application of the Portability Regulation?**

The impact assessment of the Portability Regulation<sup>194</sup> assessed the potential impacts and costs of the Regulation on service providers and rightholders. Building on this assessment, our study identified the following types of costs for service providers arising from the application of the Portability Regulation:

- Direct costs arising from changes in the authentication of consumers
- Direct costs arising from changes in the technological infrastructure
- Direct costs arising from the revision of contracts with consumers
- Direct costs arising from the revision of agreements with rightholders
- Indirect costs arising from the need to update technical network infrastructures

These costs are discussed in separate sub-chapters below. In addition, we present the challenges that service providers face when applying the Portability Regulation.

#### **Direct costs arising from changes in the authentication of consumers**

All surveyed service providers offering only music, e-books and game services offered cross-border portability to the same extent as required in the Portability Regulation before the Regulation came into force. In addition, none of them reported that verifying the user's Member State of residence was challenging (see Figure 19). Thus, **with some exceptions, they did not have any direct costs arising from the changes in the authentication of consumers**. One music service provider introduced data protection-related changes in order to comply with the Portability Regulation's rules. They introduced the capacity to delete all data about a consumer and anonymise streams data (they are obliged by contract to store stream data for 10 years, as the rightholder requires the service provider to be able to show what has been listened to for more than 20 seconds in the last 10 years; the service provider does not need to store who streamed the music - only what was streamed). This was mostly for legal costs and they were quite significant<sup>195</sup> for them (around 10,000 EUR).

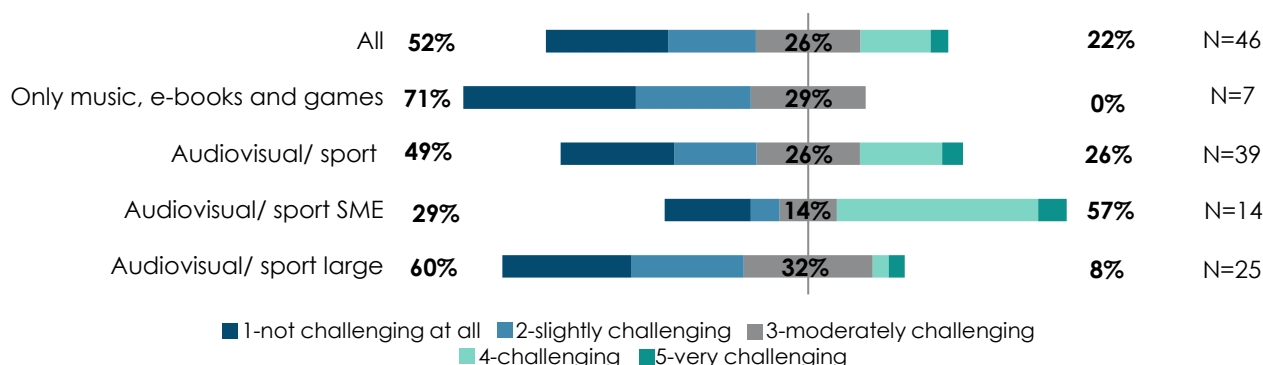
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<sup>194</sup> European Commission (2015). Impact assessment: Proposal for a Regulation of the European Parliament and of the Council to ensure the cross-border portability of online content services in the internal market. COM(2015) 627 final, SWD(2015) 271 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2015%3A0270%3AFIN>

<sup>195</sup> The significance of costs is a relative measure. What is significant for one service provider (e.g. SME) might not be significant for other service providers (e.g. large companies).



**Figure 19. Respondents' opinion about the statement "Verifying user's Member State of residence" in the survey question "Q22. What do you, as an expert of the online content industry, think is the most challenging while applying the Portability Regulation?"**

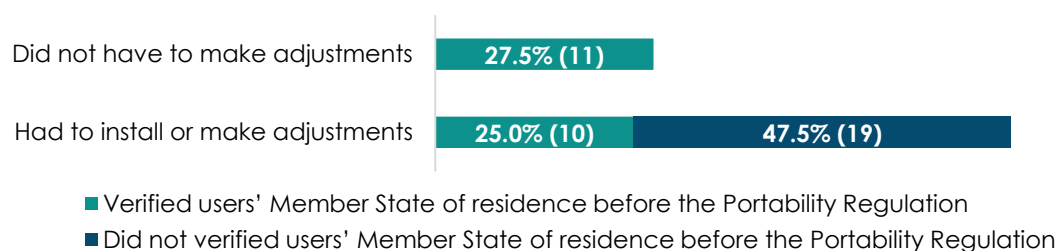


Note: N of the different groups are presented in the figure. N excludes respondents who answered „I don't know/can't answer“.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

The situation differs in the audiovisual and sports sectors. Here, 100% of service providers offering services in all or most EU countries (7 respondents) and only 42.4% of service providers that were offering services in one or more EU countries verified the Member State of residence before the Portability Regulation came into force. Of the ones verifying the Member State of residence before the Regulation, 48% had to make adjustments to the verification process. In sum, 72.5 % of the audiovisual and sports sector service providers either had to modify or implement the verification of the Member State of residence as a consequence of the application of the Portability Regulation (see Figure 20 below). Service providers offering services in one or more EU countries were the ones that usually had to install or adjust the verification means (79% of them compared to 21% of service providers offering services in all EU countries).

**Figure 20. Share of services providers in audiovisual and sports sectors that had and had not to adjust their verification means**



Note: N=40.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

Verifying the Member State of residence was mostly challenging for SMEs, as 57% of SMEs (all of those that answered this question are offering services in one or more EU countries) in the audiovisual and sports sectors (compared to 8% of large companies) reported that verifying the user's Member State of residence was challenging or very challenging (see Figure 16). However, survey and interview data show that the costs linked to **the installation or adjustment of verification means, with some exceptions, were not significant**. These costs consisted of the following, as reported in the interviews:

- Adjusting the already existing means so that they would verify the Member State of residence of the consumer (e.g. updating the back-end of the services to ensure that it can identify the users for whom the Regulation applies, updating the IP address checking process, updating databases, how the data is transferred and recorded, discussing and deciding on the best fitting means of verification). Some service providers noted that they were updating their infrastructure and these costs were absorbed during these updates. Thus, the costs were insignificant. Others mentioned that adjusting the verification means did not require major

technological changes, thus the costs were minor. In addition, one service provider outsources the verification process to a third party, thus all changes are made and costs are borne by the third party. The service provider is not aware of the size of these costs. In an exception, one service provider mentioned that all costs, including costs for the adjustment of verification mechanisms, were in the millions and were considered to be significant for the company.

- Implementing a verification system that uses a credit card to verify the Member State of Residence.
- One service provider introduced a system that can verify and link a phone number to the country of residence (although this verification mean is not defined in the Portability Regulation). The system introduced ongoing costs, as they have to pay for the SMS sent for verification. However, the costs are considered to be insignificant.
- One service provider reported that they had to buy new equipment, buy additional services from third parties or start partnerships with them. These investments were significant for them.

### Direct costs arising from the changes in the technological infrastructure

**All surveyed service providers offering only music, e-books and game services did not need to make investments into the technical infrastructure in order to comply with the Portability Regulation. While in the audiovisual and sports sectors 35% of service providers (33% of service providers offering services in one or more EU countries and 43% of service providers offering services in all EU countries) did not make investments into the technical infrastructure.** The remaining audiovisual and sports sector service providers needed to install a new infrastructure (18% of respondents), update their existing infrastructure (45% of respondents) or invest in additional services from third parties (10% of respondents). The interview data suggest that the changes in technological infrastructure were largely due to changes in the authentication of consumers and thus they are reported above. In addition, the following costs were reported:

- Contacting the external Content Delivery Network (CDN) providers or other third parties that ensure services accessibility in the selected territories and requesting to allow their services in all EEA countries
- Changing the configuration of their own CDN setup (e.g. redefining a higher caching key to allow consumers to access content outside of their Member State of residence and to ensure the most efficient way of delivering content to users abroad)
- Increasing peering capacity and optimising off-net user experience to be able to handle the additional loads
- Whitelisting the European (EEA) IP addresses that were geo-blocked previously or making changes in the existing geo-blocking systems
- Implementing some configuration/integration/coding (making changes related to geo-blocking and implementation of third-party databases) and testing to ensure that the cross-border portability feature works

These costs were one-off and were considered insignificant. In addition, one service provider had to change the coding to enable usage under cross-border portability, to produce new informational boxes, new interfaces and to make some changes within the company. These changes have cost millions of euros and were substantial costs for their company.

### Direct costs arising from the revision of contracts with consumers

**The study shows that less than half of the service providers revised the contracts with consumers due to the introduction of the Portability Regulation. The costs of such changes were minor and did not require extensive resources.** 47% of the service providers analysed in the mystery shopping exercise (16 out of 34) and 29% of surveyed service providers introduced changes in their contracts with consumers. The difference in this share shows that service providers with a higher market share (we selected service providers for the mystery shopping exercise based

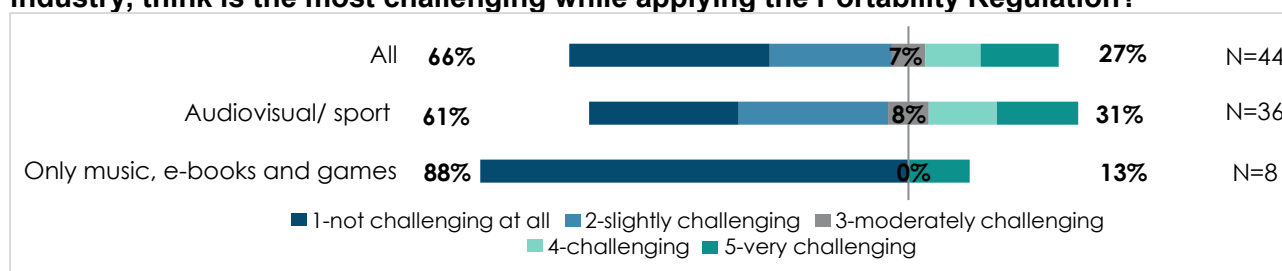
on this criteria) were more likely to introduce changes in their contracts with consumers. Survey results also confirm this explanation. More of the large companies (45%) changed contracts with consumers compared to SMEs (5%). All of the surveyed service providers that introduced changes in their contracts (15 respondents) added information on cross-border portability, while some also added information on the notion of being temporarily present in a Member State other than the residence (4 respondents), information on the means to verify their Member State of residence (4 respondents), information on the processing of additional personal data collected because of the Portability Regulation (3 respondents) or information on the restrictions on the quality of delivery outside of the Member State of residence (8 respondents). These changes have not affected the consumers in any other way besides allowing them to use cross-border portability. Based on the interviews, the costs of such changes were minor and did not require extensive resources.

**Direct costs arising from the revision of agreements with rightholders**

**The majority of surveyed service providers did not face significant challenges and costs in the renegotiation of contracts with rightholders due to the introduction of the Portability Regulation.** Although the Portability Regulation does not require the revision of contractual agreements (see Article 7.1 of the Portability Regulation), 33% of surveyed services providers revised their contracts with rightholders, all of whom are from the audiovisual/sports sector. The survey data shows that these were mostly large audiovisual/sports sector service providers (56% of them changed contracts with rightholders compared to 13% of SMEs in this sector). However, none of them reported terminating contracts or changing licensing fees.

Both the data from the service providers’ survey and interviews as well as interviews with rightholders, suggest that in most cases the revisions in contracts with rightholders were minor and did not have an impact on working relationships between service providers and rightholders. This is also confirmed by the fact that only 27% of the surveyed service providers (mostly service providers in the audiovisual and sports sectors) reported that renegotiating contracts with rightholders was challenging or very challenging (see Figure 21). Agreements were only amended to add a clause about the Portability Regulation or to introduce additional security measures. Thus, no significant negotiations were needed. This was mainly because the Regulation introduces a “legal fiction” on the localisation of the copyright-relevant act (Article 4 of the Regulation) and service providers did not have to obtain licences in all of the EU and EEA countries. In a limited number of cases, service providers reported that they had long and tense negotiations with rightholders (especially with rightholders in the sports sector who were especially careful with their contracts; this is because their content has a powerful national component, and the value of their content is much higher in their main country as opposed to in others). One service provider reported that renegotiations required many extra hours of the service provider’s legal team’s time and even required the hiring of more lawyers. One other service provider reported that renegotiating with 60 publishers (introducing the Portability Regulation and what it entails) was been a challenge in terms of time and resources. They hired lawyers to ensure that everything was dealt with and that all of the contracts comply with the Regulation. In addition, one service provider noted that big rightholders requested extensive updates on the agreements while also adding information about cross-border portability and verification means.

**Figure 21. Respondents’ opinion about the statement “Renegotiating contracts with rightholders” in the survey question “Q22. What do you, as an expert of the online content industry, think is the most challenging while applying the Portability Regulation?”**



Note: N of the different groups are presented in the figure. N excludes respondents that answered “I don’t know/can’t answer”. Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

### Indirect costs arising from the need to update the technical network infrastructure

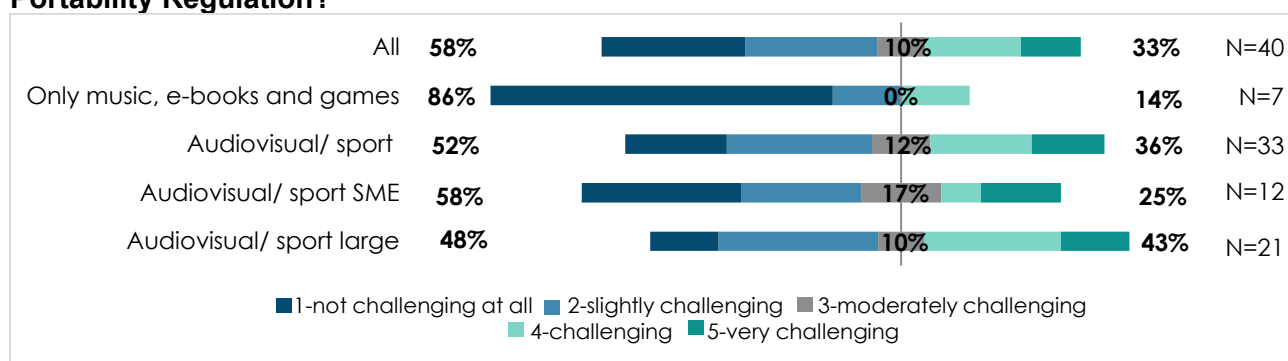
The Regulation does not oblige service providers to update their technical infrastructure to ensure the same quality across borders<sup>196</sup>, but service providers may want to do that for reputational purposes (e.g. delays in starting video and interruptions increase abandonment rates and results in a loss of viewership<sup>197</sup>). In addition, rightholders may also ask service providers to ensure the same quality across borders. Interview results show that **no significant indirect costs resulting from the introduction of the Portability Regulation were faced**. Three service providers reported insignificant indirect costs. One of them (providing paid transactional services) reported that as the Regulation is complicated and mostly directed at subscription-based services, it required a lot of thinking and discussion on how to apply the Regulation in order to comply with its requirements. The costs were not significant and only faced during the initial implementation. Others reported opening additional CDNs in a broader range of countries, with the aim of ensuring that consumers would have no issues when connecting to their service or installing an Adaptive Bit Rate (ABR) streaming system in order to fully ensure quality when a subscriber is outside of the Member State of residence. In addition, one service provider reported duplicating their servers in order to be able to provide good quality services in the other EU Member States. These developments took some time and the costs were quite significant for the company, as around 60% of the company's staff worked on these developments for 6 months.

### Other challenges linked to the application of the Portability Regulation

In addition to the major areas of challenges reported above, a remaining group of challenges implied by Brexit and the requirements on personal data protection are presented below.

**Dealing with the UK not being in the EU Single Market as of 1 January 2021** was challenging or very challenging for 33% of the surveyed service providers. This was mostly challenging for the audiovisual and sports sectors and especially for large service providers in these sectors (see Figure 22).

**Figure 22. Respondents' opinion about the statement “Dealing with the UK not being in the EU Single Market as of 1 January 2021“ in the survey question “Q22. What do you, as an expert of the online content industry, think is the most challenging while applying the Portability Regulation?”**



Note: N of the different groups are presented in the figure. N excludes respondents that answered „I don't know/can't answer“.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

The biggest issue with the UK not being in the EU Single Market as of 1 January 2021 is that the UK was a country where many consumers travelled and used cross-border portability. Several service providers reported that it is a destination where consumers regularly travel or that a large diaspora of their nationals are living there and using their services. Thus, service providers received complaints from some annoyed consumers threatening to cancel their services (this would not have a major impact as this is a relatively small share of consumers). Service providers are dealing with

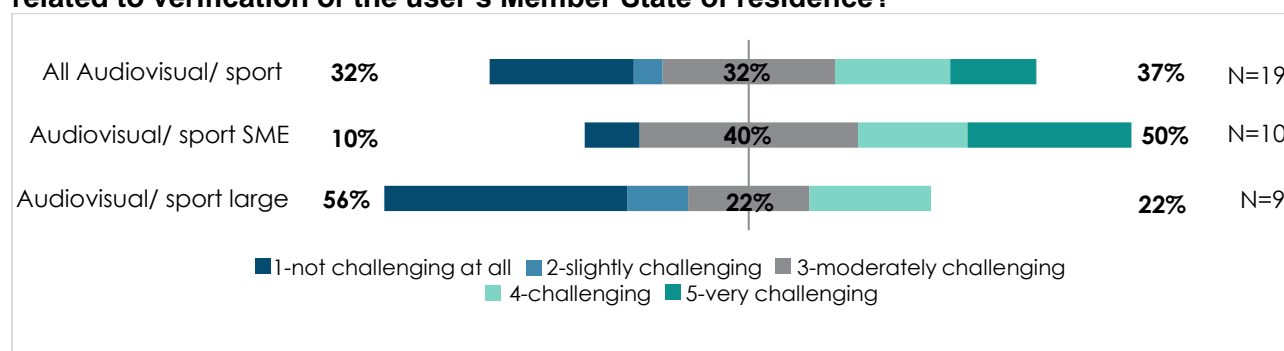
<sup>196</sup> This is why the costs arising from the investments in ensuring the same quality across borders is considered indirect.

<sup>197</sup> [https://people.cs.umass.edu/~ramesh/Site/HOME\\_files/imc208-krishnan.pdf](https://people.cs.umass.edu/~ramesh/Site/HOME_files/imc208-krishnan.pdf)

these complaints through their customer service by explaining the reasons why their service is available in the UK. Service providers are still hoping that an agreement at the international level regarding the issue can be reached in the near future. Some are also considering obtaining rights to stream in the UK (especially rights to sports events), although some respondents see this step as very costly. In addition, service providers had to introduce some minor technical changes to remove the UK from the application of the cross-border portability feature. The uncertainty about how the situation will end up was also challenging, as service providers did not know until the very end of 2020 if they needed to make any adjustments.

**Complying with verification and data protection related rules** (e.g. using only two means to verify the Member State of residence, verifying the Member State of residence only upon conclusion and the renewal of the contract, collecting IP data only in binary format) was challenging or very challenging for 35% of the surveyed audiovisual and sports service providers. SMEs find it more challenging than large companies (see Figure 23). The challenges reported during the interviews relate to not collecting more data than necessary, navigating situations when the data protection laws in the country do not allow them to link a consumer's name with additional data used for verification.

**Figure 23. Respondents' opinion about the statement “Complying with personal data protection rules while verifying the Member State” in the survey question “Q22.1. What do you think is the most challenging while complying with the Portability Regulation rules related to verification of the user’s Member State of residence?”**



Note: N of the different groups are presented in the figure. N excludes respondents that answered “I don’t know/can’t answer”.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

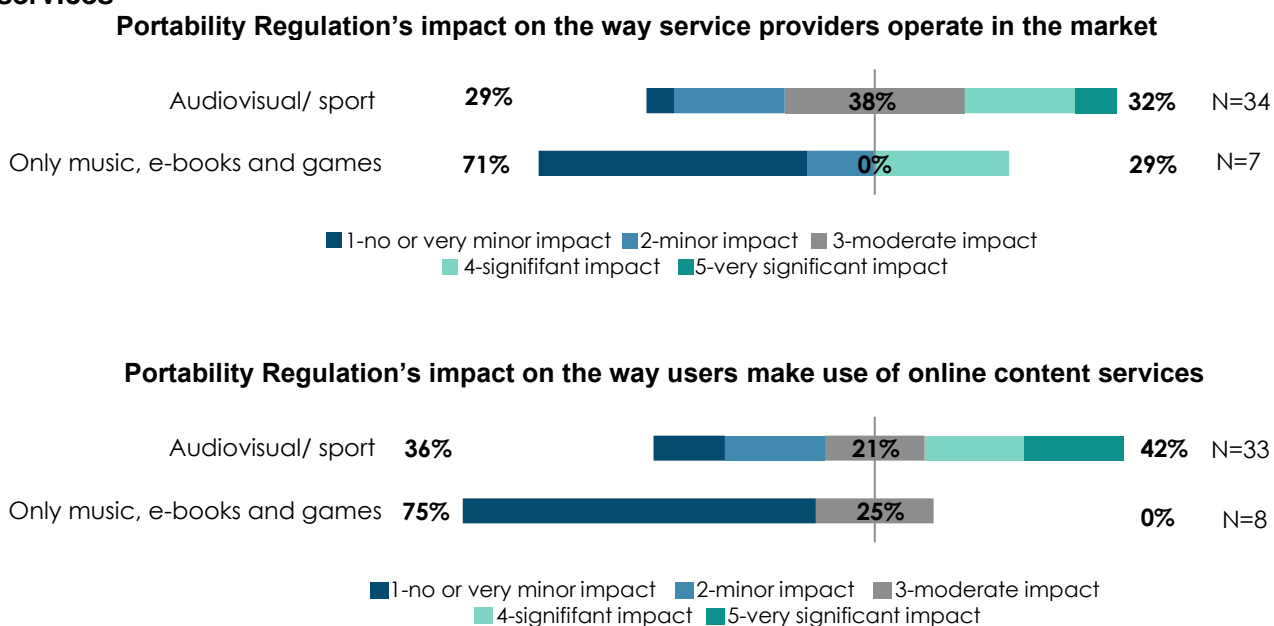
In addition to the above-mentioned challenges, some service providers also highlighted that it is not clear how the Portability Regulation applies to service providers that are registered outside of the EU, but that are streaming in the European Union and considered that it would be useful if the European Commission could clarify this. One service provider noted that it would also be useful to have clarification of the exact territories where the Regulation applies (e.g. European territories overseas, such as French islands).

**2.2.8. What is the impact of the Portability Regulation on consumers and the way service providers operate?**

This section presents the perception of the surveyed service providers about the impact of the Portability Regulation on consumers and the way service providers operate. This perception differs based on the sector where services are provided (see survey results in Figure 24).



**Figure 24. Service providers' opinion about the impact of the Portability Regulation on the way service providers operate in the market and, on the way users make use of online content services**



Note: N of the different groups are presented in the figure. N excludes respondents that answered "I don't know/can't answer".

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**The majority of service providers operating only in the music, e-books and game sectors see the impact of the Portability Regulation (both service providers and consumers) as none or minor.** This is largely because most of the service providers in these sectors were portable before the Regulation was introduced<sup>198</sup>. In addition, some respondents noted that all of their services are accessible in most countries of the world, thus cross-border portability is not an issue for them.

**Service providers in the audiovisual and sports sectors have mixed opinions about the impact of the Regulation on the way they operate,** resulting from their differences in applying the Regulation. On the one hand, some service providers reported that the introduction of the Regulation required no or only minor technical adjustments and that there were no additional costs or changes in daily operations and relationships with rightholders. On the other hand, other service providers reported that they needed to make adjustments to comply with the Portability Regulation (this is discussed in more detail in the previous chapter).

With regard to the **impact on consumers**, on the one hand, the absolute majority of the interview respondents have not faced any significant shift in demand or the type of usage of their services that could be attributed to the application of the Portability Regulation. Only a couple of service providers reported that they saw an increase in the use of cross-border portability during the summer. Most of the interviewed service providers believe that the Portability Regulation did not have a significant impact on the demand or type of usage of their services because of the following reasons:

- the existing travel restrictions (mobility between countries in Europe decreased dramatically; according to The World Tourism Organization (UNWTO), Europe was the second-hardest hit of all global regions, with a 66% decline in tourist arrivals in the first half of 2020<sup>199</sup>)

<sup>198</sup> Responses from interviews and the European Commission (2015). Impact assessment: Proposal for a Regulation of the European Parliament and of the Council to ensure the cross-border portability of online content services in the internal market. COM(2015) 627 final, SWD(2015) 271 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2015%3A0270%3AFIN>

<sup>199</sup> UNWTO (2020). World Tourism Barometer, 18(5). Available online at: <https://www.e-unwto.org/doi/epdf/10.18111/wtobarometereng.2020.18.1.5>

- overall relative newness of the Regulation
- the fact that the Regulation is relevant only for consumers who travel

In addition, one respondent believed that the Regulation could have been communicated more extensively by the European Commission, as was the case for the Roaming Regulation. On the other hand, despite the lack of evidence, some of the respondents still believe that the positive impact of the Portability Regulation was significant since it provides a completely new feature to their services and brings a high benefit to users.

### 2.3. Assessment of the experience on the implementation of the Portability Regulation by national consumer organisations and authorities

This chapter corresponds to Task 3 of the Study. This Task aims to assess consumers' experience with the cross-border portability of online content services, problems that consumers have faced and the ways these problems have been dealt with. The assessment is based on 40 responses (30 from consumer organisations from 22 EU Member States and 10 from data protection authorities) to the survey and 11 interviews conducted with consumer organisations, covering 10 EU Member States<sup>200</sup>.

#### 2.3.1. General views of consumers on the Portability Regulation

Overall, consumer organisations do not have any evidence on how familiar consumers are with the Portability Regulation, however, some of the interviewed organisations' representatives think that **consumers lack awareness about the Portability Regulation**. A third of the interviewed respondents indicated that the Regulation did not receive sufficient publicity, consumers are often unsure of whom to complain to or confuse cross-border portability with cross-border access, i.e. access to online content services offered in other Member States. Interviewees believe that consumers could benefit from more information about the Regulation.

Nevertheless, the consensus among the interview respondents is that **the lack of awareness of any particular legislation is not a major issue and should not impact the number of complaints that organisations receive**. Some respondents have indicated that consumers are generally not aware of specific legal texts, however, they are familiar with the general notion of the Digital Single Market and their rights to freely access services that they have subscribed to across the EU.

#### 2.3.2. The impact of the Portability Regulation on consumers

Based on our survey data, **most of the data protection authorities are not involved in dealing with issues related to the Portability Regulation, while different consumer organisations have varying levels of involvement**.<sup>201</sup> Overall, 35% of survey respondents did not have an opinion about the impact of the Portability Regulation on better-addressing consumers' needs regarding the cross-border portability of the subscribed online content services. This share includes 6 out of 10 surveyed data protection authorities. The fact that the majority of surveyed data protection authorities have not formed an opinion about the impact of the Portability Regulation may imply that they are not involved in the implementation of the Regulation at the national level. Less than a third of surveyed consumer organisations did not have an opinion on the impact of the Regulation. This suggests that surveyed consumer organisations have different levels of involvement with implementation of the Regulation.

**Surveyed consumer organisations have mixed opinions regarding the level of impact that the Portability Regulation has** on better addressing consumers' needs. Half of the surveyed consumer organisations and data protection authorities<sup>202</sup> indicated that the Regulation had a significant or very significant impact on better-addressing consumers' needs in this area (see Figure 25). Respondents have suggested the following areas of added value:

- Some respondents indicated that they used to receive many complaints regarding access to online content services when travelling to other Member States before the Regulation came into force. **The number of complaints has dramatically decreased** since then – one organisation reported a 90-95% decline in complaints, while other respondents have

<sup>200</sup> Austria, Belgium, Bulgaria, Germany, Ireland, Italy, Lithuania, Poland, Slovenia, Spain.

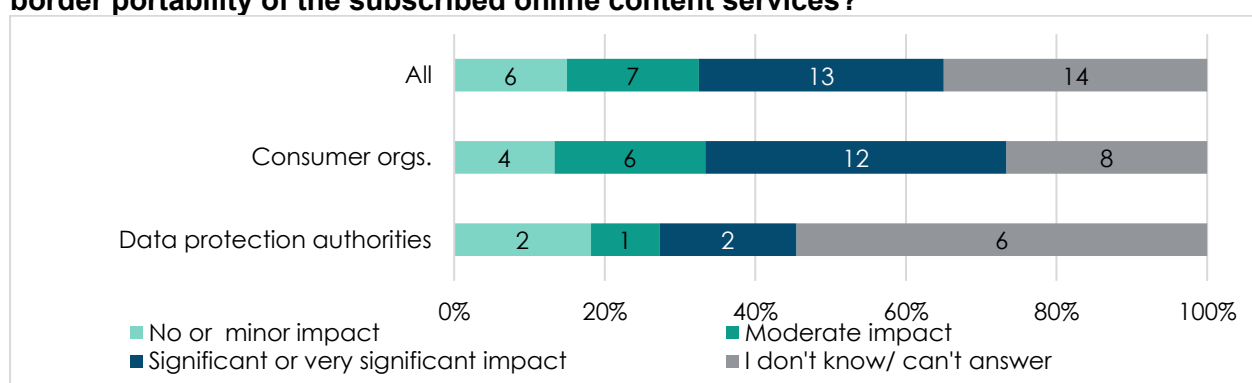
<sup>201</sup> This is based on the assumption that organisations that have dealt with the Portability Regulation-related issues would have formed an opinion on the importance of the Regulation for better addressing consumers' needs regarding the cross-border portability of the subscribed online content services.

<sup>202</sup> Excluding respondents who answered "I don't know /I can't answer" to survey question 4. In your opinion, what impact did the Portability Regulation have on better addressing consumers' needs with regard to cross-border portability of the subscribed online content services?

indicated that while they used to receive some complaints before the Regulation, they have not received any since. This implies that consumers' needs were addressed by the Regulation and/or that consumers complain to service providers themselves and issues do not escalate to the consumer organisations' level.

- Some respondents have highlighted that the **Regulation reinforces the Digital Single Market** as it legally allows people to take the content that they have subscribed to abroad when they travel. This is especially important in light of the rise of the information society, people being increasingly dependent on their devices and travelling more.
- One of the interview respondents indicated that the Regulation provides them with a **legal basis in their discussions with service providers** when they receive a complaint from a consumer, which results in more successful resolutions of cases.

**Figure 25. Responses to the survey question “4. In your opinion, what impact did the Portability Regulation have on better addressing consumers’ needs with regard to cross-border portability of the subscribed online content services?”**



Note: N=40.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

As illustrated by Figure 25, the other half of the survey respondents rated the impact that the **Portability Regulation had on better addressing consumers’ needs as moderate to none**. On average, a slightly larger share of respondents think that the impact of the Regulation was moderate (27%), minor or none (23%).<sup>203</sup> In some respondents’ views, while the Regulation was a step in the right direction **it did not significantly change the factual situation**. They believe that the market was already swiftly developing and would have offered such a feature by itself in the near future. Other respondents indicated that the **Portability Regulation’s scope is too limited** to have a significant impact. They believe that further access should be provided to consumers, encompassing the online content that is currently geo-blocked, as it is not in the scope of the Geo-Blocking Regulation<sup>204</sup> (see Box 9).

### Box 9. Cross-border access to audiovisual content

The issue of increasing cross-border access to content is the most prominent one for the audiovisual services. **The demand for cross-border access to audiovisual services appears to be highest among copyright-protected content** services and increasing. 9% of internet users have tried to gain access to audiovisual content across borders and 31% are interested in such access (compared to 5% and 29% respectively in 2015).

The first short-term review of the Geo-Blocking Regulation<sup>205</sup> assessed the possibility of extending the Geo-Blocking Regulation’s scope to electronically supplied services giving access to copyright-protected content.

<sup>203</sup> These percentages are calculated excluding respondents who answered “I don't know/I can't answer” to survey question 4. In your opinion, what impact did the Portability Regulation have on better addressing consumers’ needs with regard to cross-border portability of the subscribed online content services?

<sup>204</sup> Regulation (EU) 2018/302

<sup>205</sup> Report from the Commission on the first short-term review of the Geo-blocking Regulation - COM/2020/766 final: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0766>

The review found that the effects of such an extension would vary by type of content, depending on the level of consumer demand and on the availability of content across the EU. The study on the extension of the Geo-Blocking Regulation indicates that, under certain conditions, the extension to audiovisual content would **potentially unlock many items for consumers, especially in currently underserved Member States (at least in the short term). However, this may also have complex implications for the European audiovisual sector.** As a follow-up, the Commission announced that it will launch a dialogue with the industry to agree on concrete steps to improve the availability and access to audiovisual content across the EU.

Sources: SWD(2020) 294 final, Flash Eurobarometer 477b (2019), DG COMP sector enquiry (2017) on the scope of licensed rights in the AV sector, VVA (2020). Study on the impacts of the extension of the scope of the Geo-blocking Regulation to audiovisual and non-audiovisual services giving access to copyright protected content. Final Report.

During interviews, some respondents suggested the following ideas to increase the impact of the Portability Regulation on consumers (similar ideas were also highlighted by interviewed respondents and can be seen in Box 11., sub-chapter 2.4.3.):

- Introduction of **a monitoring mechanism** that would be available to public authorities. It would contain information on data collected by service providers, violations of data protection rules and limitations on cross-border portability. This would provide valuable insights on the implementation of the Regulation and evidence of potential breaches.
- Introduction of **a stronger oversight and enforcement system**, such as the designation of a regulator or supervisor, an authority that is empowered and tasked with enforcing the Regulation and using enforcement mechanisms (e.g. fines).
- **Clarifying the concept of “temporarily present” in another Member State.** Consumer organisations had two approaches to this. For instance, one respondent suggested that a clear time limit should be established as the lack of a specific number of days in the Regulation provides room for interpretation for service providers. This theoretically allows service providers to exclude certain types of travellers (e.g. people studying or working abroad - such a temporary presence may last a few months, while a service provider can define the notion of “temporary presence” to be, for example, one month). Another respondent believes that service providers should be forbidden from putting a time limit on their services at all (as an interpretation of “temporarily present”). Currently, the majority of analysed service providers have not set a limit on temporary presence in another Member State (as shown in sub-chapter 2.2.2.).

### **2.3.3. Consumers’ experience with the implementation of the Portability Regulation**

In 2019, one year after the introduction of the Portability Regulation, consumer satisfaction was somewhat reduced – overall, less than 60% of people considered cross-border portability as working well (cross-border portability worked best in the music sector (61% of respondents considered it to be working well) and worst in the game and sports sectors (52% and 53% of respondents respectively considered it to be working well)).<sup>206</sup> However, according to survey results, **the majority of consumer organisations and data protection authorities have not received any complaints regarding the Portability Regulation.** 32 out of 40 surveyed organisations reported not receiving any complaints regarding the application of the Portability Regulation (see Figure 23). Respondents have suggested that this may be the case because of a combination of factors. Firstly, it may imply a smooth implementation of the Regulation’s requirements. The mystery shopping results support this, as 38 out of 39 service providers tested provide cross-border portability. Secondly, COVID-19 related travel restrictions were in force for a considerable part of the implementation period and a lack of awareness about the Portability Regulation the on consumers’ part may have also contributed to the lack of complaints received.

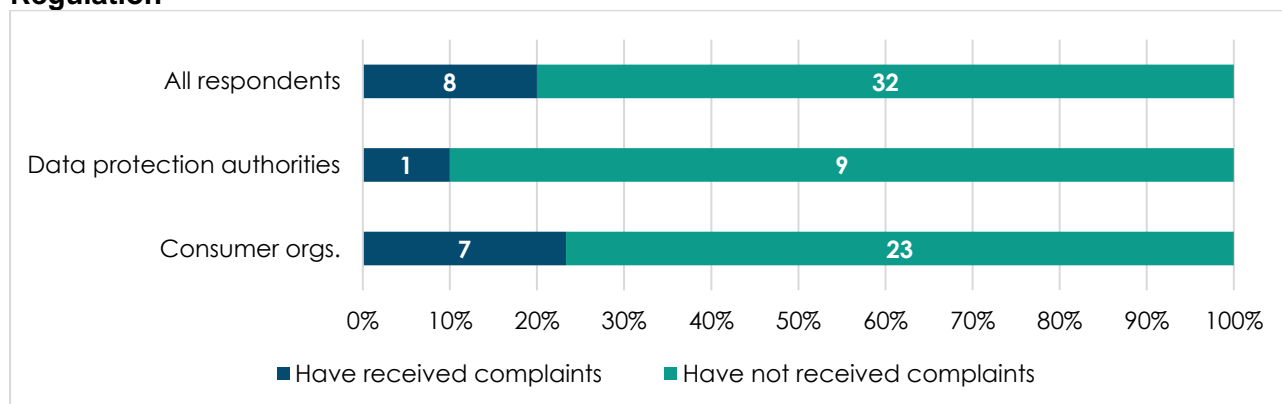
**Complaints regarding cross-border portability were received by one-fifth of the respondents** and most of the complaints were related to the unavailability of the service itself or a specific content

<sup>206</sup> Kantar Public (2019). Flash Eurobarometer 477a – February – March 2019 “Accessing content online and cross-border portability of online content services”. Report.



or features of the service when used in another Member State. Information regarding specific types of complaints received by the eight organisations that have received complaints is provided below.

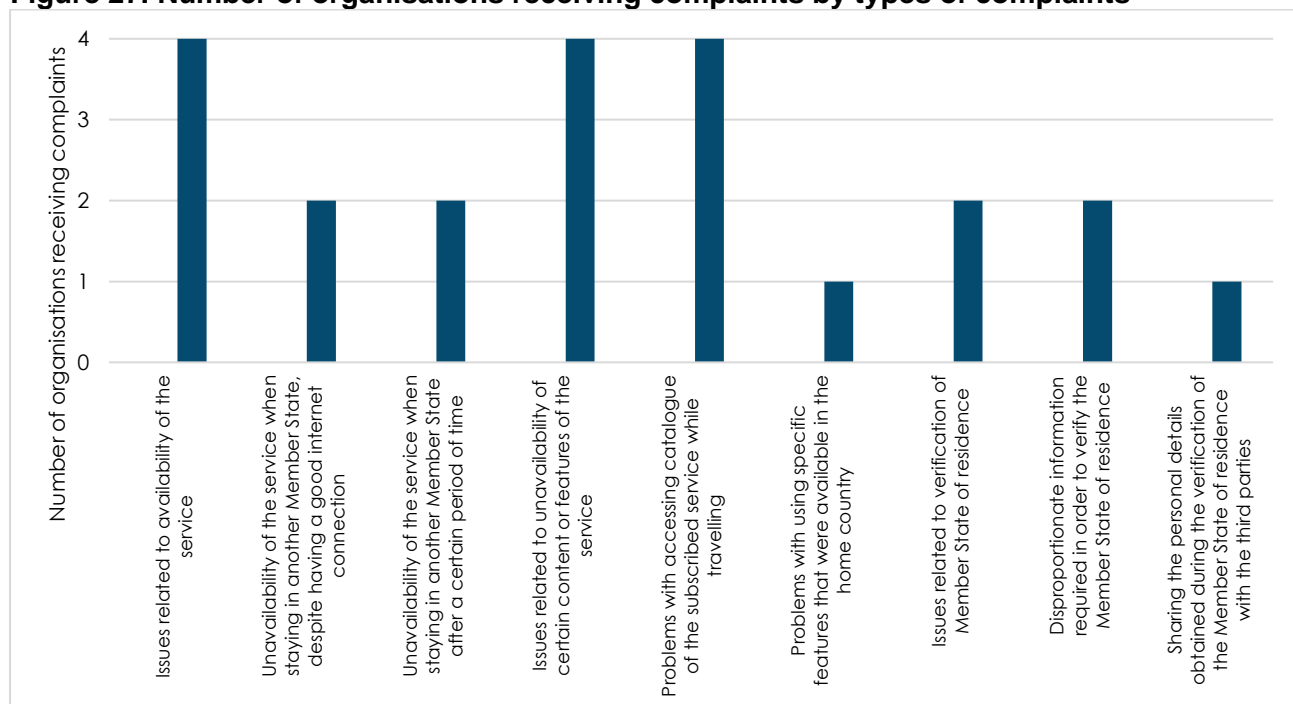
**Figure 26. Number of organisations that received complaints regarding the Portability Regulation**



Note: N=40.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Figure 27. Number of organisations receiving complaints by types of complaints**



Note: N=40.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

As illustrated by Figure 27, four consumer organisations reported that they have received **complaints focusing on issues related to the availability of service when used in another Member State**. This type of complaint was reported to be, on average, occasional. As mentioned above an unavailability of services was only detected in one (out of 39) service tested during the mystery shopping exercise. However, respondents have received complaints regarding the following issues:

- Unavailability of service when staying in another Member State, despite having a good internet connection (reported by three organisations). Three interview respondents specified that before the Portability Regulation and when the Regulation was just introduced in 2018, they used to receive many queries about consumers not being able to access the content that they had subscribed to when they were travelling, most of which were usually successfully resolved following mediation by consumer organisations. This was the case for

all types of online content (e.g. audiovisual, game, sports) and, reportedly, for large service providers. Once the Regulation was implemented, only one of the interview respondents received a complaint concerning a consumer's inability to use the Polish TV streaming service in the United Kingdom after 1 January 2021. However, this was due to the fact that the United Kingdom had by then left the EU, thus the Regulation did not apply in the United Kingdom's territory anymore.

- Unavailability of service when staying in another Member State after a certain period of time (reported by two organisations).<sup>207</sup>

Some **complaints relating to the unavailability of certain content or features of the service** were reported by four consumer organisations. This type of complaint was, on average, occasional as well. The issue was not identified during the mystery shopping exercise, as the same content and the same features were available regardless of the consumer's location. However, the surveyed consumer organisations did report complaints regarding the following:

- Problems with accessing the catalogue of their subscribed service while travelling (access to a different catalogue, or limited catalogue) (reported by four organisations).<sup>208</sup>
- Problems with using specific features that were available in the Member State of residence (e.g. subtitles, accessibility features for persons with disabilities, streaming function, features enhancing the consumer experience) (reported by one organisation).<sup>209</sup>

Finally, two consumer organisations reported that they have received **complaints about the verification of the Member State of residence**. This type of complaint was rarely received. In particular, complaints focused on the following issues:

- A disproportionate amount of information was required in order to verify the Member State of residence (e.g. using more than two means to verify the Member State of residence, determining the exact location of the consumer) (reported by two organisations). One of the interviewed consumer organisations indicated that it has received complaints about service providers requiring consumers to provide extensive information, such as a full address, name, residency permit, documented evidence that they live in a country, or rental contracts. Consumers were worried about the protection of their personal data and they were unsure what information the service provider is allowed to require from subscribers. In addition, obtaining some of the required documentation is not free in the country where the consumer organisation is based (e.g. obtaining official residency evidence costs around 8 EUR).
- Personal details obtained during the verification of the Member State of residence were shared with third parties (reported by one organisation).<sup>210</sup>

Based on the data collected, organisations usually undertake the following steps to deal with complaints related to cross-border portability:

1. They check whether the service provider in question is based in the EU and whether the services are provided against payment (or is a free-of-charge service provider who voluntarily applies the Portability Regulation).
2. They inform the consumer of his/her rights in the matter. In some cases, if a consumer's complaints about service providers' actions are unjustified, this is the end of the process.
3. They proceed to contact the service provider themselves or direct the consumer to a relevant authority for further action (mostly to European Consumer Centres). These organisations then contact the service provider on the consumer's behalf.

<sup>207</sup> The interviewed organisations could not provide specific examples of this type of complaint.

<sup>208</sup> The interviewed organisations could not provide specific examples of this type of complaint.

<sup>209</sup> The interviewed organisations could not provide specific examples of this type of complaint.

<sup>210</sup> The interviewed organisations could not provide specific examples of this type of complaint.

According to the interviewed consumer organisations, this process usually ends in a successful resolution— service providers are generally willing to make adjustments to ensure that the consumers' right to cross-border portability across the EU is being fulfilled.

Based on the interview data, consumers' **complaints regarding the Portability Regulation were relatively more prominent at the very beginning of the application of the Portability Regulation**. Respondents speculate that service providers were still in the initial stages of implementation of the Regulation's requirements, thus, cross-border portability was not available to its full extent. Currently, complaints regarding the Portability Regulation are rare and are usually the result of technical problems (e.g. consumer using a VPN service which is blocked by the service provider, service provider not having unblocked certain IP addresses) or consumers not fully understanding what the Regulation entails (e.g. complaints about not being able to access a specific piece of content that is not available in their Member State of residence). In general, the interviewed consumer organisations believe that the limited number of complaints has been caused by a combination of factors, such as the smooth implementation of the Regulation's requirements, travel restrictions and limited consumer awareness of the Regulation.

#### **2.3.4. Enforcement measures**

Based on the survey and interview data, there are three enforcement mechanisms in place to ensure the correct application of the Portability Regulation. These include the Consumer Protection Cooperation (CPC) network, a redress option - Alternative Dispute Resolution (ADR) and other national enforcement measures that are available in all Member States.

**The CPC Network** consists of authorities responsible for enforcing EU consumer protection laws and protecting consumers' interests in the EU and EEA countries. The CPC Regulation<sup>211</sup> has been applied from 17 January 2020. It introduced several improvements so that EU consumer protection laws could be better enforced. **Nearly 70% (19 out of 28) of the surveyed consumer organisations and national consumer organisations' survey respondents are part of the CPC Network**. In addition to that, generally, respondents see **the CPC Network as an important mechanism** for the effective enforcement of consumer rights for cross-border portability. Even though to date none of the interview respondents had to use the CPC Network for cross-border portability-related issues, it is a mechanism that **they would turn to if there was a structural problem or a pan-European breach** of the Portability Regulation. In addition, the CPC Network is also supported by an electronic database (confidential), where members can forward information or complaints (alerts) to other members and find out whether any other Member State has faced the same issue. Thus, the Network could also provide members with information on the application of the Portability Regulation across the EU. The only issue that was pointed out by the respondents regarding the functioning of the CPC Network, based on their previous experiences when using this external alert mechanism on other topics, was that they did not receive any further information about the progress of cases that they submitted.

**ADR bodies, which could be used for settling contractual disputes between consumers and service providers are available in every MS**. The majority - 74% (17 out of 23) - of the survey respondents indicated that they are aware of such mechanisms. Six interview respondents specified that there are **different types of ADRs in their countries**, which could be used in cases of disputes related to the Portability Regulation. In particular, in three cases there are sector-specific ADR bodies, in two cases other authorities perform ADR functions (e.g. Civil Consumer Protection Service) and in one case there are ADR bodies in each administrative unit of the country. None of the interview respondents were aware of any cases of ADR bodies having dealt with issues related to the Portability Regulation. The general effectiveness of these bodies, as perceived by the interview respondents, depends on the **mandatory versus voluntary policy** applied by the ADRs. The ADRs were perceived as being more effective in countries where the participation of the service provider and the implementation of the resolution are mandatory. In cases where both the

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<sup>211</sup> Regulation (EU) 2017/2394. A more thorough analysis can be found in sub-chapter 2.1.1. Overview of legal developments.

participation and implementation of the resolution are voluntary, the interview respondents considered ADR bodies to be ineffective.

Finally, a few respondents reported existing **national enforcement measures** that could be used to enforce the Portability Regulation in their country. One survey respondent indicated that in Sweden an alternative enforcement power, which is used to address infringements of consumer laws, could also be used to address infringements on the Portability Regulation. However, that particular respondent has not agreed to be contacted further, so we have been unable to follow up on this. During the interviews, the Agency for Communication Networks and Services (Slovenia) and Trade Inspections and National Broadcasting Council (Poland) have been identified as alternative national enforcement organisations that have measures that could also be used for the enforcement of the Portability Regulation. So far, none of these enforcement measures have been used in practice regarding the Portability Regulation. Thus, there is no information about what the procedures would look like in this case. However, interview respondents have suggested that they would probably resort to mediation between the service provider and consumers.

### 2.3.5. Monitoring and awareness

According to the data collected via survey and interviews, **none of the consumer organisations or data protection authorities have monitored the implementation of the Portability Regulation**. Specifically, no respondents from the survey and interviews have indicated that they have carried out mystery shopping exercises to check the application of the Portability Regulation or conducted surveys about consumer satisfaction with the Portability Regulation. However, in 2016, the German Consumer Association of Rhineland-Palatinate (Verbraucherzentrale Rheinland-Pfalz) conducted a survey regarding the Geo-Blocking Regulation<sup>212</sup>. The survey found that 64% of respondents who use paid streaming services think that the services should be accessible across the EU. A later (2018) survey conducted by the same organisation<sup>213</sup> found that nearly half (49%) of all consumers had experienced problems when trying to access online content they had subscribed to in other EU countries. The problems identified by the respondents related to the unavailability of content that they were able to access in Germany (around 25% of respondents experienced this problem), unavailability of previously downloaded content (22% of paid TV media library users and 17% of paid video streaming service users experienced this problem). As the survey was taken at the end of October 2018, these results are in line with the feedback from consumer organisations showing that complaints regarding the Portability Regulation were relatively more prominent at the very beginning of the application of the Portability Regulation.

**Only a small share of survey respondents (4 respondents) reported conducting awareness-raising campaigns concerning the Portability Regulation.** Based on the interview data, the campaigns consisted of posting information about the Portability Regulation on organisations' websites, Facebook pages and, in some cases, the media. An example of this is presented in Box 10. Our data does not indicate a connection between the organisations that have conducted awareness-raising campaigns and the number of complaints received.

#### Box 10. Case study of awareness campaigns on cross-border portability conducted by consumer organisations

Some national consumer associations and the European Consumer Centres Network (ECC-Net) produced consumer information campaigns on the opportunities brought about by the Portability Regulation. The ECC Net helps EU citizens to enforce their rights as consumers and offers advice and assistance, for instance by contacting traders or by advising citizens on how to resolve disputes.

<sup>212</sup> Verbraucherzentrale Rheinland-Pfalz (2018). "Geoblocking: preventing access to digital content". Factsheet. Available at <https://www.verbraucherzentrale.de/sites/default/files/2019-11/faktenblatt-geoblocking-portabilitaet-englisch.pdf>.

<sup>213</sup> Verbraucherzentrale Bundesverband (2018). Despite Portability Regulation: Problems with Streaming abroad in the EU. Available at: <https://www.vzbv.de/pressemitteilungen/geoblocking-weiterhin-probleme-beim-streaming-im-eu-ausland>

**The Verein für Konsumenteninformation (VKI)**, the Austrian Consumer Information Association launched national information campaign on the benefits of the Portability Regulation. The campaign was conducted on its website, on Facebook and by giving interviews to the press.

The information campaign centred on the new rights and on the fact that consumers should have access to their online content services when travelling in the EU. It also gave a practical example of a Viennese consumer (Kurt) who travels to Paris for business purposes and benefits while there from his Netflix subscription.

It also explained that providers are allowed to check the country of residence of their subscribers and specified that the data used for verification purposes needs to be deleted.

Source: Authors' own elaboration.

### 2.3.6. Beyond cross-border portability

Beyond portability, there is a growing interest among Internet users to access content from other Member States.<sup>214</sup> While the Portability Regulation allows consumers to continue using their subscriptions to online content services when travelling to other Member States, it does not allow consumers to access online content services offered in other Member States. Such services, in particular audiovisual online content services, are often geo-blocked. It has been reported that consumers often have higher expectations regarding the rights provided by the Geo-Blocking Regulation<sup>215</sup>, including expectations regarding cross-border access to copyright-protected content illustrated by consumers' complaints regarding cross-border access.<sup>216</sup> However, as explained in section 2.1, the Geo-Blocking Regulation does not oblige online services to grant access to copyright-protected content across borders. Nevertheless, **five surveyed consumer organisations reported receiving complaints regarding cross-border access to online content services.**

Four respondents reported receiving **complaints regarding consumers being able to access the service, but not their desired content.** The average frequency of such complaints was rare. For example, one interview respondent noted that consumers were complaining that they could not buy certain games or install more advanced security measures on their PlayStation accounts because they had a Lithuanian phone number or bank account which was not accepted by the service provider for such features. In such and similar situations, the respondent organisations informed the consumers about the current legislative framework and explained to them that certain content might not be available in their country due to the territorial nature of copyright protection. Overall, these types of complaints may be explained by the fact that online content services (except for audiovisual services) are covered by Article 3 of the Geo-Blocking Regulation<sup>217</sup> (whereby providers are obliged to give access to their online interfaces) but they are not covered by Article 4 (prohibition of applying different conditions of access to goods and services).

The following types of complaints were also received by surveyed consumer organisations:

- **The service is not accessible at all to consumers from other Member States** (reported by three organisations). No online content services-related examples were provided by the interviewed organisations.
- **The website was available, but the payment method was refused** (reported by two organisations). No online content services-related examples were provided by the interviewed organisations.
- **Consumers were redirected to the website of their Member State of residence** (reported by one organisation). One organisation reported that it had received complaints regarding

<sup>214</sup> Kantar Public (2019). Flash Eurobarometer 477b – February - March 2019 “Cross-border access to content online”. Report.

<sup>215</sup> Regulation (EU) 2018/302.

<sup>216</sup> ECC network position paper, available at <https://www.ecc.fi/globalassets/ecc/ajankohtaista/raportit/2019-geoblocking-position-paper-en.pdf>.

<sup>217</sup> Regulation (EU) 2018/302.



consumers being redirected to their Member State of residence's URL address when they had been trying to access the service providers' page in another Member State. The organisation forwarded this complaint to the European Consumer Centre.

- **Mobile applications were not available for certain EU Member States' consumers** (reported by one organisation). One organisation reported that consumers were complaining about certain mobile applications (e.g. offered by audiovisual service providers and others) being released only for certain EU Member States, thus residents of other countries could not benefit from the use of such apps.

Generally, based on the interview data, when such complaints are received, they are dealt with in a way similar to that described above. First, consumer organisations **analyse the complaint and attempt to identify where the actual problem lies** – sometimes it is only a technical glitch in the system. Afterward, they **explain the applicable legislation and their rights to the consumers**. Often, they have to explain to the consumers that the practices they complain about (e.g. geo-blocking of online content services) are authorised under the current legislative framework. In **some cases, organisations mediate** communication between the consumer and service provider.

## 2.4. Assessment of possible impacts of application of the Portability Regulation on rightholders

This chapter corresponds to Task 4B of the Study. The aim of this Task is to assess the possible impacts of the Portability Regulation on rightholders and examine whether any issues have emerged regarding the safeguards provided in the Regulation, in particular as regards the verification of a subscriber's Member State of residence. To this end, we conducted 14 interviews and received two written position papers from national and European-level rightholder organisations<sup>218</sup> representing film producers and distributors, sports organisations, music producers and publishers, e-book and game publishers.

The level of cross-border portability of online content services in the EU prior to the Portability Regulation was varied due to the different licencing practices used in different segments. This implies that when the Regulation was introduced, service providers and rightholders were required to make different levels of adjustments in order to adapt to the new legal framework. Adjustments were primarily made by audiovisual and sports online content service providers, impacting rightholders in these sectors. The music, e-book and game online content segments, which allowed for portability before its entry into force through the Regulation experienced no significant impact as a result of implementation of the Regulation.

### 2.4.1. Overall impact of the Portability Regulation on rightholders

The majority of the interviewed rightholders' organisations from each online content service segment indicated that they **had a positive opinion about the introduction of the Regulation** and perceived it as a logical step in the development of a Digital Single Market as well as a positive change for consumers. Five of the interviewed organisations were familiar with and involved in the development of the notion of cross-border portability during stakeholder consultations prior to the adoption of the Regulation. Furthermore, rightholders interviewed from the music, e-book, game and a part of the sports segment had already had significant experience with cross-border portability. This was due to the fact that cross-border portability was already being offered by some service providers with whom the aforementioned rightholders organisations' members work. Finally, the rightholders from the music, e-book and game segments expressed the view that the Regulation was unnecessary for their segments because the existing licencing practices in these segments already allowed for cross-border portability before the legal intervention.

While interviewed rightholders shared the objective of the Regulation, some sports and audiovisual service segments' respondents expressed the following **concerns**:

- Interviewed rightholders were worried that the implementation of the Regulation's requirements may not necessarily be uniform across service providers. Differences in interpretation and enforcement could raise issues. In particular, a third of the interviewed organisations raised concerns about the lack of common understanding of important notions of the Regulation, such as being "temporarily present" in another Member State (see Box 11). Some of the rightholders are aware that certain audiovisual service providers do not check whether the stay in another Member State is temporary and allow long-term access to the service from other Member States<sup>219</sup>. Certain rightholders' organisations have indicated that this could potentially affect rightholders' revenues.
- Some concerns were raised regarding the verification methods proposed in the Regulation. Some rightholders' organisations consider that the methods used should provide sufficient evidence that a subscriber is, in fact, a resident in one Member States travelling only temporarily to another Member State. Rightholders believe that only robust verification methods can act as safeguards from misuses of the Regulation (see sub-chapter 2.4.3.). The

<sup>218</sup> These organisations consist of members (rightholders or rightholder organisations) from more than one EU Member State.

<sup>219</sup> The majority of surveyed service providers and service providers analysed during the mystery shopping exercise do not apply any time limits to using cross-border portability. Ten service providers reported that they do limit the time of temporary presence abroad or are planning to do so in the future (more on this can be found in sub-chapter 2.2.2.).

desire to use more verification means was also highlighted by some surveyed and interviewed rightholder organisations (see sub-chapter 2.4.3.).

- Some audiovisual content rightholders stated that the online content services market is still in its development phase and would have potentially come to offer cross-border portability by itself. The Regulation was perceived by some as the EU stepping into an area that would have evolved anyway via commercial practices and contractual agreements.

### **Box 11. Rightholders' concerns regarding the notion of temporary presence in another Member State**

Licensing practices are based on the clearance of copyright and related rights on a territorial basis. The rights granted under copyright are provided for in national law and the geographical scope of the rights are limited to the territory of the Member State granting such rights.

The financing system used for the production of new content, in particular audiovisual content, depends on the selling of distribution rights to distributors in different territories. In the audiovisual sector, distributors are granted exclusive rights to exploit a work in a specific territory. Audiovisual and sports sectors typically grant exclusive licences to distributors/service providers in each Member State separately, while the music, e-book and game sectors widely use multi-territorial licencing, providing rights for multiple territories.

The Portability Regulation overcomes the territoriality principle via a **legal fiction** through which a consumer's temporary presence in another Member State is deemed to be a presence in the Member State of residence.

Audiovisual, sports and music content rightholders expressed concerns about the lack of clarity surrounding the legal fiction. In particular, the concept "temporarily present" is not limited to a specific duration, which means that it is subject to different interpretations. Thus, for instance, a person who leaves his/her Member State of residence for several years due to professional or academic reasons may still be considered as temporarily staying in another Member State rather than the one of actual residence. This implies that the legal fiction can cover not only a short-term but also a long-term presence in another Member State. Some rightholders believe that without a limitation, the term "temporarily present" and, in turn, the legal fiction overcoming the territoriality principle is potentially infinite. This, in some of the interviewed rightholders' views (representatives of the audiovisual sector, in particular), may be dangerous, because, as aforementioned, the economy of this particular sector is largely dependent on territorial licencing.

Source: Authors' own elaboration.

All of the interview respondents reported that **the Portability Regulation had very minor or no impact** on rightholders. However, some respondents noted that the Regulation has only been applied for a short period of time that has not been long enough to notice any visible impact. Additionally, for approximately a third of the time, travel in Europe has been restricted due to Covid-19-related restrictions. The cross-border portability feature may therefore have been used to a lesser extent than usual, with limited data to report.

Music, e-book and game content rightholders' representatives expressed that due to the aforementioned pre-existing commercial and licencing practices, cross-border portability was very well established in these sectors already. Thus, the Regulation did not introduce any changes or have any impact.

While the majority of audiovisual and sports industries' rightholders did not face any impact on their overall operation either, they had to dedicate some time and resources to an analysis of the documentation, organisation of meetings and information on the new rules. Additionally, a very marginal impact on licencing practices (introducing cross-border portability clauses into their licencing agreements) was reported by sports and some of audiovisual segment representatives. None of the interviewed organisations reported any impact on revenue for two main reasons: a lack of data on the usage and temporary travellers being a very small audience with no visible impact on overall revenue. Nevertheless, after the Covid-19 restrictions are lifted, the size of the audience using cross-border portability is expected to expand.

### **2.4.2. Adjustments to licencing agreements**

One of the only impacts that the Regulation has had on some rightholders was the need to adapt their current licensing agreements to the new rules. Both interviewed sports content organisations and a fourth of interviewed audiovisual content rightholder organisations reported that they have introduced marginal adjustments to their licencing agreements, namely, including a clause on mandatory cross-border portability since the implementation of the Portability Regulation. These changes did not have any actual effect on the working relationship between rightholders and service providers.

One interviewed sports sector rightholder organisation indicated that its members have, in some cases, discussed and agreed upon the verification means with service providers (even though this is not required in the Regulation). They also introduced a clause indicating that the service provider is responsible for ensuring that the agreed verification mechanisms are properly used in practice. For most of the cases, these contractual changes were been initiated by one of the parties, but by mutual agreement, although one rightholder organisation reported having initiated the changes itself.

Music, e-book and game segments' rightholders have expressed that their pre-existing licencing agreements allowed for cross-border portability, thus no changes were required. This was also the case for some of the sports segment rightholders.

### **2.4.3. Verification of the Member State of residence**

None of the interviewed rightholders organisations had received any complaints from their member organisations regarding how service providers verify the Member State of residence of consumers or addressed any complaints to the service providers themselves. Additionally, some respondents believe that service providers are equally concerned about avoiding misuse and, in some cases, even contractually obliged to ensure a high-level of security for the verification process, which leads rightholders to trust the verification process of service providers.

Nevertheless, more than half of the interviewed rightholders organisations in the audiovisual sector and one sports content rightholders organisation think that the **verification process could be more secure**. Currently, security levels depend on each country individually because of the different technological solutions available to each one, as well as the service providers' choices. However, some rightholders expressed that the range of means of verification of the Member State of residence offered in the Regulation is not entirely satisfactory. Some of the means are considered to be not equally good indicators of a place of residence (e.g. respondents indicate that people are able to have bank accounts in several different countries, thus, payment details, which are one of the most commonly used measures, cannot confirm an actual place of residence). Rightholders' concerns are therefore not related to the way service providers conduct the verification, but rather to the types of verification means used by service providers in line with the Regulation. The improvements suggested by rightholders are presented in Box 12 below.

The interviewed rightholders' organisations **have not requested service providers to use a specific means for verifying the Member State of residence and have not been involved in defining what is meant by 'reasonable doubt'**. They **have not authorised cross-border portability without verification**.

The sports content rightholders are the only ones to be involved to a certain extent in the process. Some of them have discussed the topic with service providers, while others noted that they are able to compare the security means offered by different service providers when selling their broadcasting rights via a tendering procedure (an example of this can be found in Box 12).

The rest of the rightholders were not involved in the design of the verification means for the following reasons:

- Some audiovisual content rightholders **did not think of** the possibility to request a specific means of verification.

- The music, e-book and game segments' rightholders **were not concerned** about this verification, due to a lack of evidence showing any infringement of the Regulation or because they had pre-established verification practices that had so far been satisfactory.
- Some audiovisual rightholders' organisations reported a **lack of bargaining power** in their relationship with service providers. Independent or small-scale rightholders do not believe that they are in the position to request a specific verification means to be used by service providers. This is particularly the case for European audiovisual producers, who have little bargaining power, as they usually issue licences for only one or a few works. On the contrary, large rightholders (mostly US-based) usually sell catalogues or bulk content and write up sophisticated contracts, covering all of the possible uses of their content, and, thus, could potentially request specific verification mechanisms. The respondents believe that large rightholders could request a secure means of verification that could influence industry practices and would de facto benefit all rightholders.

### Box 12. Case study of rightholders' involvement in the choice of verification of the Member State of residence means

The security of the verification of the Member State of residence methods, as outlined in the Portability Regulation, has been reported to be one of the key concerns of the interviewed rightholders. Nevertheless, interview data show that rightholders are not usually involved in the selection of the verification means nor in the monitoring of their application by service providers. However, rightholders may include specific requirements in this regard when licensing their rights to third parties.

One of the interviewed rightholder organisations sells its broadcasting rights through a tendering procedure. In order to take part in the procedure, service providers have to submit their proposals against a common set of contractual terms. In this context, one of the clauses requires the service provider to implement the Portability Regulation's provisions and reserves the right for the rightholder to approve the choice of the means used to verify the Member State of residence. In addition to this, the rightholder has a dedicated account management team, which liaises with each service provider continuously (the topics, among others, may include the verification means of the Member State of residence). In this way, the rightholder does not impose a specific method of verification, but rather ensures that similar security standards are applied by all service providers broadcasting the rightholders' content.

Source: Authors' own elaboration.

Since most interviewed rightholders do not require service providers to use a specific means of verification, they do not have an established **monitoring process** either. Nevertheless, two of the interviewed organisations (audiovisual and sports) indicated that they do carry out ad-hoc, informal mystery shopping exercises and check the verification requirements of the service providers with whom they work. However, since this is informal and happens on an on-demand basis, no data is collected from these exercises. The exercises were conducted out of interest in the situation and no actions have followed.

Rightholders do not hold a unified opinion on whether or not the verification of the Member State of residence is a sufficient safeguard against misuses of the Regulation. One quarter of the respondents pointed out that they were not aware of any infringements. Some rightholders believe that service providers should use additional means (see Box 13) in order to ensure the secure and reliable verification of the Member State of residence. Nevertheless, almost **half of the respondents do not think that the verification of the Member State is a sufficiently strong provision to prevent infringements in the future** (the remaining respondents did not have an opinion or wanted to check with their members before answering). For most of them, this is due to the fact that the notion of temporary presence is not limited to a specific number of days in the Regulation. They also referred to the concept of reasonable doubt, which is not defined in the Regulation, thus, allowing for different interpretations. However, the analysis of service providers' application of the Portability Regulation rules shows that the majority of surveyed service providers do not use the possibility to repeat the verification of the Member State of residence in cases of reasonable doubt. Thus, a more explicit definition of reasonable doubt might not have extensive implications. Further suggestions on ways to improve the verification process are presented in Box 13 below.



### Box 13. Rightholders' suggestions for improvements of the verification of the Member State of residence process

The interviewed rightholders' representatives suggested the following means that would increase their satisfaction with and trust in the process of the verification of the Member State of residence:

- Reliance only on **independently verified information**, such as residency or voting records
- **Additional safeguarding means**, such as limiting the time that a subscriber can access the content when abroad
- Clear definition of what is considered to be "**reasonable doubt**"
- **Monitoring** of how service providers apply their verification measures
- **Regular** but rare (e.g. once a year or more frequent) **IP checks** to verify a user's MS of residence (instead of only carrying out IP checks (together with another method) during the conclusion and renewal of a contract and in cases of "reasonable doubt" as per Art 5). In some of the respondents' opinion, identifying a subscriber as using the service outside of his/her Member State of residence during regular IP checks could raise a reasonable doubt about the subscriber's residence and allow a check to determine whether or not they are entitled to benefit from the cross-border portability rules.

However, it is important to note that in practice, regular IP checks for other purposes (geo-blocking, VPN connections) might be done, as IP addresses are usually automatically recorded in the server logs of the service provider.

In some rightholders' views, the use of an IP address check at some point during usage is unavoidable to avoid a possible infringement of rights. Verification of an IP address is seen as the only measure that can provide real information on the location of a consumer and therefore identify people who are not just visiting but are actually living outside of the reported Member State of residence. Some rightholders even suggest that a regular IP check is the only sufficient safeguard from misuse of the Regulation (this is in contrast to the service providers' opinion and evidence that IP checks are sometimes circumvented using VPNs).

Source: Authors' own elaboration.

#### 2.4.4. Costs of the application of the Portability Regulation faced by rightholders

All of the interviewed respondents agreed that **rightholders faced no significant costs associated with the implementation of the Portability Regulation**. Nevertheless, some insignificant one-time-only costs were incurred – certain rightholder organisations reported that some of their members needed to review and adjust their licencing agreements, which required the legal team's time. Some organisations conducted discussions with their members, service providers, and other stakeholders about the Regulation and its application, which required some resources. Nevertheless, the costs of implementation were so insignificant that the rightholders did not document them as such.

#### 2.4.5. Rightholders' experience with the application of the Portability Regulation

The experience of interviewed rightholders with the Portability Regulation is generally based on their relationship with service providers. Due to the differences in value chains of online content services, not all rightholders work directly with service providers.

Respondents representing the music content segments noted that only the biggest members communicate directly with service providers. The rest of the music as well as audiovisual rightholders communicate through distributors and/or publishers e.g. in the music sector, the record label usually does not directly upload music to Amazon, iTunes, Google Play or any other platform providing services. This is usually done by music publishers.

In cases when rightholders do engage directly with service providers, the level of **communication between rightholders and service providers varies**. The sports and e-books content rightholders regularly communicate with service providers. Some rightholders only communicate with their service providers when there is an issue to discuss, while others (in particular the sports segment)

have dedicated account managers for each service provider, who then communicate and update each other more thoroughly. Their communication encompasses all matters, and is not restricted to cross-border portability.

The consistency of communication on cross-border portability is especially important for the sports sector. Unlike the rest of the audiovisual segment, the majority of sports content features live TV events and a significant share of the audience includes fans who want to see the events live. For this reason, the technological solutions used by the service providers to ensure high-quality and timely delivery across borders are of extreme importance for sports rightholders. Interviewed service providers indicated that they provide the same quality standards to their content when it is used in another Member State as in the one of their residence. However, one of the main issues for the sports segment's rightholders is how service providers deal with differences in local internet and technological infrastructures to ensure a full cross-border portability experience. None of the interviewed service providers have been seeking information on technical infrastructure-related differences in countries across the EEA, however, they do inform consumers about potential differences in quality implied by the local internet infrastructure. Since sports content rightholders maintain comparatively good communication with service providers, quality-related issues are currently being solved on a case-by-case basis.

Despite the differing levels of communication between rightholders and service providers that depend on the online content services segment, **none of the interviewed rightholders obtain data regarding the use of their content under cross-border portability.** Certain music, audiovisual and sports content service providers publish or share some general data about streaming but this does not include specific details, such as streaming when abroad. Nevertheless, a very large majority of the interviewees, representing each interviewed sector, expressed that such specific data would have no impact on their work and, thus, they have never requested such data from the service provider. However, two interviewed audiovisual rightholder organisations are interested in such information (e.g. for building marketing campaigns) and have requested more specific usage data from service providers, but their requests have been denied. Rightholder organisations hope that the upcoming transposition of the 2019 Copyright Directive<sup>220</sup> and its Article 19 which sets out a transparency obligation for licensees on the exploitation of works (in particular on modes of exploitation, revenues generated, and remuneration due) will improve the situation.

Most rightholders did **not report any detected abuses of the Portability Regulation**, due to the fact that they do not interact with the consumers themselves. In addition, a very limited number of abuses has been reported by surveyed and interviewed service providers themselves (see sub-chapter 2.2.1.). Respondents representing the music and audiovisual sectors speculate that misuse is certainly happening, even if unintentionally. For instance, respondents have anecdotal evidence of people buying a subscription in one country at a lower cost and then using it in another country where the subscription costs are higher. In addition, they also referred to people using the services bought in their Member State of residence while living in another country. However, since the Regulation does not specifically define the duration under which cross-border portability can be used, rightholders believe that it is not "illegal" and, thus, they do not know how they might address the issue. Finally, one rightholder organisation reported that one service provider requires a fee for the provision of the cross-border portability feature<sup>221</sup>; another rightholder organisation reported that they know of at least one service provider that does not verify the Member State of residence of its subscribers<sup>222</sup>. They have not investigated this issue any further.

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<sup>220</sup> Directive (EU) 2019/790.

<sup>221</sup> This information could not be confirmed via publicly available sources.

<sup>222</sup> This information could not be confirmed via publicly available sources. Furthermore, this particular service provider was tested during the mystery shopping exercise conducted for this study and it can be confirmed that it does collect the information required for the verification of the Member State of residence (payment details).

## CONCLUSIONS

This section presents the conclusions based on the data collected for this study. The conclusions are formulated on two aspects: implementation of the Portability Regulation rules and the impacts of the Regulation on service providers, rightholders, and consumer organisations.

### ***Implementation of the Portability Regulation***

The results of the study show that the overwhelming majority of paid online content service providers apply the Portability Regulation and provide consumers with the cross-border portability feature. All of the paid service providers tested during the mystery shopping exercise ensured the cross-border portability of their content and survey results only indicated a few exceptions. While the temporary travel restrictions due to COVID-19 have reduced the demand for cross-border portability at present, based on a 2019 Eurobarometer survey, nearly a third of people who have subscriptions to online content services have tried to access content while they have temporarily been in another EU country. Consumers who use the cross-border portability feature usually use it for a short period of time (up to a week or less than 2-3 weeks) and 2-5 times a year.

Certain limitations to cross-border portability have been identified only in a limited number of cases during the study: the unavailability of content on some particular devices, offering cross-border portability only after the consumer enables the cross-border portability feature and limiting the time of temporary presence abroad.

In addition, consumer organisations reported a very low number of complaints concerning cross-border portability. They explained that the number of complaints they receive regarding access to online content services when travelling to other Member States has significantly declined since the Regulation was introduced. Complaints received by 8 out of 40 surveyed organisations focus on the availability of the service, the availability of certain content or features, and the verification of the Member State of residence process. When such complaints were received, the surveyed and interviewed consumer organisations identified the home country of the service provider, informed consumers of their rights and contacted the service provider (or another authority that is in a position to contact the service provider) for mediation. This process is usually sufficient to reach a successful resolution in these cases. None of the interviewed consumer organisations have had to resort to any additional enforcement mechanisms (e.g. Consumer Protection Cooperation (CPC) Network, Alternative Dispute Resolution (ADR) bodies or alternative national enforcement mechanisms) regarding Portability Regulation-related issues.

The study also looked at how service providers verify a consumer's Member State of residence. The results of the service providers' survey show that the most common means to verify the Member State of residence are the IP address and payment details. The majority of the interviewed service providers find that verification of the Member State of residence means defined in the Regulation is sufficient. They did not identify a significant number of abuses or major efforts to circumvent verification and do not see any incentives for consumers to do so. None of the interviewed rightholders requested service providers to use a specific means of verification, except in the sports sector. Nevertheless, almost half of the interviewed rightholder organisations do not think that the verification of the Member State is a sufficiently strong safeguard to prevent infringements. Most of the interviewed rightholders have concerns about possible abuses of cross-border portability. They consider that there is a lack of clarity in the Regulation regarding the notions of "temporary presence" and "reasonable doubt".

### ***Impacts of the Portability Regulation on service providers, rightholders, and consumer organisations***

The majority of the stakeholders that participated in the study see the Portability Regulation as a positive development. Although the interviewed service providers have not faced a significant shift in demand or type of usage of their services that could be attributed to the application of the Portability Regulation, they consider the Portability Regulation to be a positive development, as it

provides them with an additional feature of their services that is valued by their consumers. The majority of the interviewed rightholders expressed that they had a positive opinion about the introduction of the Regulation; it was perceived as a logical step in the development of a Digital Single Market and as a positive change for consumers. The surveyed and interviewed consumer organisations generally view the Portability Regulation as a positive new development for consumers. Half of the respondents believe that it has had a significant impact because it reinforces the Digital Single Market and provides a legal basis for mediation with service providers. The other half believe that the Regulation had a moderate to zero impact because of the limited scope of the Regulation.

The impact of the Portability Regulation depends on the sector in which the service providers or rightholders operate.

In most cases, the surveyed and interviewed service providers and rightholders operating only in the music, e-book and game sectors did not incur any significant costs related to the introduction of the Portability Regulation, as these sectors had been offering cross-border portability prior to the Regulation.

The situation is different in the audiovisual and sports sectors. The surveyed service providers had to make some changes to comply with the Regulation, in particular in relation to the authentication of consumers, their technological infrastructures, and the revision of contracts with consumers and rightholders. However, with some exceptions, the costs incurred by these changes were reported to be insignificant. Rightholders in these sectors also reported only a very minor impact by the Regulation. Interviewed rightholder organisations faced minor changes but have raised some concerns. They were mainly worried that interpretations of the Regulation's requirements may not be uniform and that the verification methods employed by service providers may not be sufficient to prevent abuse.

In principle, the Regulation does not require adapting licences that have been concluded between rightholders and service providers. Thus, only a third of the interviewed rightholders (all of them operating in the sports and audiovisual sectors) and surveyed service providers have made adjustments to their licencing agreements. The changes amounted to incorporating a clause stating that mandatory cross-border portability now applies. In addition, less than half of the surveyed service providers introduced changes in their contracts with consumers and the challenges and costs related to these changes were insignificant.

### ***Impacts of recent legal, technological and market developments***

Recent legal, technological and market developments do not pose significant challenges to the application of the Portability Regulation. On the contrary, our analysis of legal developments that have taken place since the adoption of the Portability Regulation show that enforcement of the Portability Regulation will most probably be strengthened in the future. In particular, the Digital Content Contracts Directive (DCD), the CPC Regulation and the Directive on Collective Redress could contribute to enabling consumers to obtain redress in cases of breach of the Portability Regulation. In addition, technological developments within cloud infrastructure services (mainly Content Delivery Networks (CDNs)) are lowering barriers for providing good quality digital services across borders. Technologies for determining the identity and citizenship/residence of consumers without compromising privacy are all making it easier for service providers to comply with the Portability Regulation. Finally, developments in the digital content market, in particular with the increasing use of cloud solutions, the prevalence of mobile smart devices and the increasing popularity of social media, drive demand for online content services and could stimulate their cross-border usage.





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Source: Authors' own elaboration.

## Annex 2. Surveys' implementation statistics

Online surveys were one of the main data collection methods of this project. We implemented two online surveys during this project. This Annex presents the main features of both surveys and aggregated answers to the questions not extensively presented in the main report, while Annex 5 provides the lists of survey respondents. The purpose and the main features of the surveys are presented in Table 1 below.

**Table 1. Purpose and main features of surveys**

Survey	Purpose	Target group	Number of invitations sent	Number of responses	Response rate
Online survey of service providers	To collect information on how service providers apply the Portability Regulation, what challenges they face, and what are the costs and impact of the Regulation.	Online content service providers. The targeted persons within the organisations were different for different types of service providers: <ul style="list-style-type: none"> <li>• With regard to global service providers, we targeted people from EU affairs or public relations departments.</li> <li>• With regard to smaller service providers, we mainly targeted CEOs. Alternatively, we tried to contact CTOs<sup>223</sup></li> <li>• For linear service providers that also provide content on demand, we targeted heads of on-demand service departments.</li> </ul>	528 (including 69 targeted service providers <sup>224</sup> )	62 (including 6 partial responses and 20 targeted service providers)	12% (29% for targeted service providers)
Online survey of national and European consumer organisations and relevant national authorities	To collect information on consumers' experience with the cross-border portability of online content services	European and national consumer organisations and national authorities in charge of consumer protection or directly in charge of monitoring the application of the Portability Regulation	114	40 (including 3 partial responses)	35%

Source: Authors' own elaboration.

### Survey of online content service providers

The survey of online content service providers was open for responses beginning on 15 December 2020 to 26 March, 2021.

The results of the survey are integrated into the study findings and can be seen in the main body of the report. In addition, below we present aggregated answers to the entire survey questions report.

<sup>223</sup> Chief Technology Officer

<sup>224</sup> List of the most popular service providers (service providers with the highest market share) agreed with DG Connect. These service providers were followed up with more extensively (see more information about follow-up below).

**Table 2. Q1. Which of the following online content services does the service provider that you represent provide? Please select all options that apply to the service provider that you represent.**

Sector	Number of responses
Audiovisual (films/TV series) and Sports	49
Music or podcast	19
E-books and(or) Audiobooks	8
Games	4

Note: N=62.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 3. Q1.1. Which of the following audiovisual (incl. sports) services does the service provider that you represent provide? Please select all options that apply to the service provider that you represent.**

Audiovisual and sports segments	Number of responses
Transmission of live broadcasts	31
Catch-up TV	32
On-demand content	47

Note: N=49.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

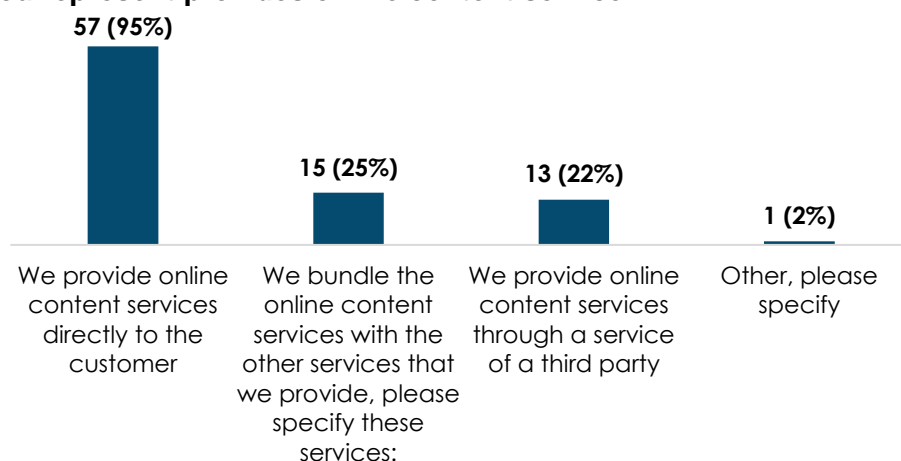
**Table 4. Q2. What type of services does the service provider that you represent provide? Please select all options that apply to the service provider that you represent. If your organisation offers freemium pricing, please select all answer options that apply.**

Type	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Free of charge services	27 (11 providing only free of charge services)	20 (9 providing only free of charge services)	7 (2 providing only free of charge services)
Paid subscription-based services (providing services for a monthly/ yearly fee)	46	39	7
Paid transactional services (users pay for each unit of content to purchase or rent on a one-off basis)	26 (3 providing only transactional services)	23 (1 providing only transactional services)	3 (2 providing only transactional services)

Note: N=62.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Figure 1. Q3. Please select all of the statements that apply to how the service provider that you represent provides online content service**

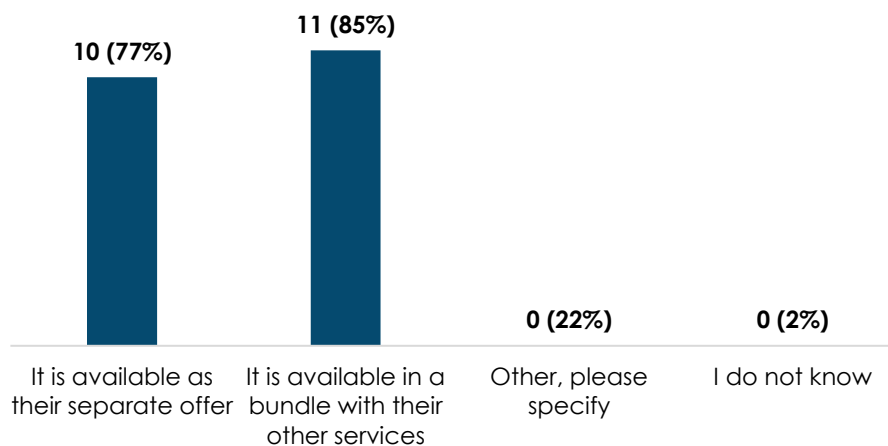


Note: N=60.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).



**Figure 2. Q3.1. How does the third party provide your online content services?**



N= 13.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 5. Q4. Is the service provider that you represent an SME?**

Is the service provider that you represent an SME?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	26	7	19
No	36	5	31

Note: N=62.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 6. Q5. In what EU and EEA countries (i.e. Iceland, Lichtenstein and Norway) are your services provided?**

In what EU and EEA countries (i.e. Iceland, Lichtenstein and Norway) are your services provided?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
In most countries of the world, including all EU and EEA countries	18	9	9
In all EU and EEA countries	4	1	3
In some EU and EEA countries	20	20	0
In one EU or EEA country	20	20	0

Note: N=62.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

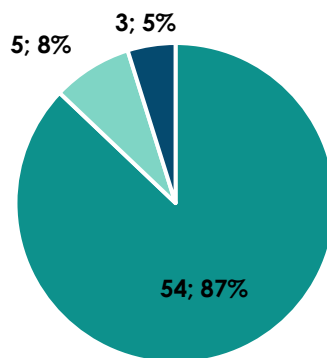
**Table 7. Q5. What are the countries where service providers offering services in some or one EU or EEA country provide?**

Country	Responses in AV sector
Austria	5
Belgium	8
Bulgaria	3
Croatia	3
Cyprus	1
Czech Republic	1
Denmark	4
Estonia	1
Finland	3
France	5
Germany	7
Greece	2
Hungary	1
Iceland	2
Ireland	4
Italy	4
Latvia	1
Liechtenstein	0
Lithuania	3
Luxembourg	4
Malta	0
Netherlands	8
Norway	4
Poland	3
Portugal	5
Romania	3
Slovakia	1
Slovenia	4
Spain	4
Sweden	4

Note: N=40.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Figure 3. Q6. Does the service provider that you represent offer portable online content services inside the Member State of subscriber’s permanent residence?**



- Yes, our online content services are portable inside country(-ies) where our services are available
- Yes, our online content services are portable inside AT LEAST ONE country where our services are available
- No, our online content services are not portable inside country(-ies) where our services are available

Note: N= 62.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 8. Q7. Approximately how many users in the EU and EEA countries (i.e. Iceland, Lichtenstein and Norway) use your services monthly?**

Number of monthly users in the EU and EEA countries	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Up to 1 million	27	21	6
1 - 4.9 million	7	7	0
5 - 14.9 million	5	4	1
15 - 30 million	1	1	0
Over 30 million	3	1	2
I do not know/do not want to answer	15	12	3

Note: N=58.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 9. Q8. How is the content that the service provider you represent offers licenced?**

How is the content that the service provider you represent offers licenced?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
All of our content has a pan-European licence	2	0	2
Most of our content has a pan-European licence	7	3	4
Most of our content has a territorial-based licence	18	16	2
All of our content has a territorial-based licence	23	23	0
It depends on the content	5	3	2
Other, please specify	3	2	1

Note: N=58.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 10. Q9. From whom does the service provider you represent seek a licence?**

From whom does the service provider you represent seek a licence?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Rightholders directly	24	19	5
Collective management organisations	0	0	0
Both	32	27	5
Other, please specify	3	1	2

Note: N=59.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 11. Q10 Has the service provider that you represent applied the Portability Regulation? (Question specific only to free-of-charge service providers)**

Has the service provider that you represent applied the Portability Regulation?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, we are offering our users cross-border portability of our online content	5	5	0
We are working towards ensuring cross-border portability under the Portability Regulation	1	1	0
No, we are not planning to apply the Portability Regulation	5	3	2

Note: N=11.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 12. Q10.1. What are the main reasons for the service provider that you represent not to apply the Portability Regulation? Please assess how important are the following statements for your organisation's decision not to apply the Portability Regulation.**

What are the main reasons for the service provider that you represent not to apply the Portability Regulation?	1- not important at all	2- slightly important	3 – moderately important	4- important	5 – very important
1. Verification issues (the need to implement a login space, inform the users and rightholders, privacy concerns)	0	0	1	2	1
2. Technological constraints (e.g. a need to invest in the technical infrastructure)	0	0	0	2	2
3. The cost-benefit analysis (e.g. the need to install login features, concerns about losing certain revenues, insignificant demand for portability) does not justify the application of the Portability Regulation	0	0	1	3	0
4. Our service is already accessible in all EU Member States, therefore there is no need for us to apply the Portability Regulation	2	0	0	1	1
5. This is not our priority, e.g. we prioritise our paid services that we have for premium content	4	0	0	0	0
Other, please specify: Responsibility to ensure cross-border accessibility lays with content providers	0	0	0	0	1

Note: N=4.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 13. Q11. Does the service provider that you represent collect statistics about the use of cross-border portability of its provided online content services?**

Does the service provider that you represent collect statistics about the use of cross-border portability of its provided online content services?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	16	15	1
No	37	28	9

Note: N=53.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 14. Q11.1. What is the approx. share of users who regularly make use of cross-border portability of online content services provided by your organisation, i.e. access and use those services when temporarily present in a Member State other than their Member State of residence?**

What is the approx. share of users who regularly make use of the cross-border portability of online content services provided by your organisation, i.e. access and use of those services when temporarily present in a Member State other than their Member State of residence?	Number of responses
Up to 1%	3
1 – 4.9%	7
5 – 9.9%	1
10 – 19.9%	2
20 – 44.9%	1
45 – 69.9%	0
70 – 100%	0
We do not collect this type of statistics	1
We measure this with a different indicator.	1

Note: N=16. Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 15. Q11.2. How often, on average, a typical user makes use of cross-border portability of online content services provided by your organisation?**

How often, on average, a typical user makes use of cross-border portability of online content services provided by your organisation?	Number of responses
Less often than once a year	0
Once a year	3
2-5 times a year	4
6-11 times a year	0
Once a month	0
2-3 times a month	0
Once a week or more often	0
We measure this with a different indicator, please specify the indicator and its value:	0
We do not collect this type of statistics	9

Note: N=16.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 16. Q11.3. What is an average duration the typical user makes use of cross-border portability of online content services provided by your organisation?**

What is an average duration the typical user makes use of cross-border portability of online content services provided by your organisation?	Number of responses
One week or less	2
2-3 weeks	4
About a month	0
2-3 months	1
Over 3 months. Please specify an average duration in months:	0
We measure this with a different indicator; please specify the indicator and its value:	0
We do not collect this type of statistics	9

Note: N=16.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 17. Q11.4. Does the service provider that you represent collect any other information about the use of cross-border portability?**

Does the service provider that you represent collect any other information about the use of cross-border portability?	Number of responses
No	14
Yes	2

Note: N=16.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 18. Q12 What content does the service provider that you represent provide for users under cross-border portability (while they are temporarily present in other than their residence Member State)?**

What content does the service provider that you represent provide for users under cross-border portability (while they are temporarily present in other than their residence Member State)?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Only the content that is available in their Member State of residence	37	34	3
Both the content that is available in their Member State of residence and the content that is available in the Member State where the user is temporarily present	13	9	4
Other, please specify	2	0	2

Note: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).



**Table 19. Q13. Which of the following means of verification does the service provider that you represent use to verify a user's Member State of residence? Please select all of the means that apply to the service provider that you represent.**

Which of the following means of verification does the service provider that you represent use to verify a user's Member State of residence?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
An identity card, any other valid identity document, or use electronic means of identification (e.g. eIDAS solutions)	9	9	0
Payment details such as the bank account or credit/debit card number	28	23	5
The place of installation of a set top box, a decoder or a similar device used for the supply of services to the user	13	13	0
Payment by the user of a licence fee for other services provided in the Member State, such as public service broadcasting	2	2	0
An internet or telephone service supply contract or any similar type of contract	11	11	0
Registration on local electoral rolls that are publicly available	0	0	0
Payment of local taxes that is publicly available	0	0	0
A utility bill of the user	3	3	0
The billing address or postal address of the user	16	15	1
A declaration by the user confirming the user's address	10	9	1
An internet protocol (IP) address check, to identify the Member State where the user accesses the online content service	32	24	8
None of the above, as we already have sufficient information about the user to verify their Member State of residence. In this case, please specify where you get this information from:	0	0	0
Other, please specify	2	2	0

Notes: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 20. Q13.1. How does the service provider that you represent implement IP address checks?**

How does the service provider that you represent implement IP address checks?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
We use IP address checking as a service from a third party	17	16	1
We use in-house IP address checking means	15	8	7

Note: N= 32.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 21. Q14. In what circumstances does the service provider that you represent may raise reasonable doubts about the subscriber's Member State of residence and may repeat the verification of the Member State of residence of the subscriber? Please select all options that apply.**

Q14. In what circumstances does the service provider that you represent may raise reasonable doubts about the subscriber's Member State of residence and may repeat the verification of the Member State of residence of the subscriber? Please select all options that apply.	Total number of responses	Responses in AV sector	Responses in non-AV sectors
When a customer changes its contact details (e.g. billing address)	10	10	0
When a customer changes its payment means to a credit card or account that was issued or registered in a different Member State	8	7	1

When a customer has not connected to the service from her/his MS of residence for a certain period of time. Please specify this period	3	3	0
We do not use the possibility to repeat the verification of the Member State of residence in case of reasonable doubt about a subscriber's Member State of residence	30	25	5
Other, please specify:	3	2	1

Notes: N=50.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 22. Q15. Has the service provider that you represent encountered any abuses when users try to access content intended for other Member State residents (e.g. by faking a location, using a virtual private network (VPN), virtual credit cards)?**

Has the service provider that you represent encountered any abuses when users try to access content intended for other Member State residents (e.g. by faking location, using virtual private network (VPN), virtual credit cards)?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, many cases of abuses	1	1	0
Yes, but in a limited number of cases	17	14	3
No	18	14	4
We do not know	17	14	3

Note: N=53.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 23. Q16. Were there any changes in the agreements/contracts that the service provider that you represent had with rightholders and customers due to the introduction of the Portability Regulation?**

Were there any changes in the agreements/contracts the service provider that you represent had with rightholders and customers due to the introduction of the Portability Regulation?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, both agreements/contracts with rightholders and with customers were changed	9	9	0
Yes, only agreements/contracts with rightholders were changed	8	8	0
Yes, only contracts with customers were changed	6	4	2
No	29	21	8

Note: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 24. Q16.1. Please select the changes that have been made in agreements/contracts with rightholders due to the introduction of the Portability Regulation.**

Please select the changes that have been made in agreements/contracts with rightholders due to the introduction of the Portability Regulation.	Number of responses
Agreements/contracts were terminated, and new ones were signed	0
Agreements/contracts were amended to comply with the Regulation	14
Licence fees were amended	0
Other, please specify:	4

Note: N=17.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 25. Q16.2. Please select the changes that have been made in the contracts with customers due to the introduction of the Portability Regulation.**

Please select the changes that have been made in the contracts with customers due to the introduction of the Portability Regulation.	Number of responses
We added information on the cross-border portability of our online services	15
We added information on the notion of being temporarily present in a Member State other than the residence	4
We added information on the means we use to verify their Member State of residence	4
We added information on the processing of additional personal data collected because of the Portability Regulation	3
We added information on the restrictions of quality of the delivery outside the Member State of residence	8
Other, please specify:	2

Note: N=15.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 26. Q17. Have any rightholders authorised the service provider that you represent to offer cross-border portability without the verification of the Member State of residence? In such cases, the contract for the provision of an online content service between the service provider that you represent and the user shall be sufficient to determine the user's Member State of residence.**

Have any rightholders authorised the service provider that you represent to offer cross-border portability without the verification of the Member State of residence?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	9	5	4
No	43	37	6

Note: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 27. Q18. Has the service provider that you represent informed its users about the cross-border portability of services?**

Has the service provider that you represent informed its users about the cross-border portability of services?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	34	30	4
No	18	12	6

Note: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 28. Q18.1. Please select the ways in which the service provider that you represent provides information about cross-border portability to users?**

Please select the ways in which the service provider that you represent provides information about cross-border portability to users?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Including information in the contracts	18	18	18
Providing information on our website	26	26	26
Informing users by email	9	9	9
Other, please specify:	5	5	5

Note: N=34. Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 29. Q19. Has the service provider that you represent received any complaints from customers about the use of cross-border portability (e.g. through a customer service)?**

Has the service provider that you represent received any complaints from customers about the use of cross-border portability (e.g. through a customer service)?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	9	8	1
No	43	34	9

Note: N=52.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 30. Q19.1. Please select the type of complaints that have been received by the service provider that you represent.**

Please select the type of complaints that have been received by the service provider that you represent.	Number of responses
Issues with the verification of the Member State of residence	4
Limited choice of content	1
Problems with the quality or speed of the online services	2
Unavailability of the online service(s) when accessing from another EU/EEA country	3
Unavailability of the online service(s) when accessing from another EU/EEA country after a certain period of time	0
Issues with personal data protection	0
Lack of information about portability	1
Other, please specify:	4

Note: N= 9.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 31. Q20. Did the service provider that you represent verify users' Member States of residence before the Portability Regulation came into force on April 1, 2018?**

Did the service provider that you represent verify users' Member States of residence before the Portability Regulation came into force on April 1, 2018?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes	30	21	9
No	20	19	1

Note: N= 50.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 32. Q20.1. Did the service provider that you represent offer cross-border portability of online content services before the Portability Regulation came into force in April 1, 2018?**

Did the service provider that you represent offer cross-border portability of online content services before the Portability Regulation came into force in April 1, 2018?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, to the same extent required in the Portability Regulation	13	4	9
Yes, but to a lesser extent (e.g. only in particular cases or only in particular countries)	2	2	0
No	15	15	0

Note: N= 30.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 33. Q20.2. Did the service provider that you represent have to adjust the means used to verify the Member State of residence after the Portability Regulation came into force in April 1, 2018?**

Did the service provider that you represent have to adjust the means used to verify the Member State of residence after the Portability Regulation came into force in April 1, 2018?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, we had to make significant adjustments	3	3	0
Yes, but the adjustments were rather minor	8	7	1
No	19	11	8

Note: N= 30.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 34. Q21. Did the service provider that you represent need to make investments into the technical infrastructure in order to comply with the Portability Regulation?**

Did the service provider that you represent need to make investments into the technical infrastructure in order to comply with the Portability Regulation?	Total number of responses	Responses in AV sector	Responses in non-AV sectors
Yes, we needed to update the existing infrastructure	18	18	0
Yes, we needed to install a new infrastructure	7	7	0
Yes, we needed to invest in additional services from third parties (e.g. contracting content delivery network (CDN) service providers)	4	4	0
No	23	14	9
Other, please specify:	2	2	0

Note: N= 49.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 35. Q22. What do you, as an expert of the online content industry, think is the most challenging while applying the Portability Regulation? Please rate the following potential issues.**

Total number of responses (N=50)	1- not challenging at all	2- slightly challenging	3 – moderately challenging	4- challenging	5 – very challenging	I don't know/ can't answer
1. Verifying user's Member State of residence	14	10	12	8	2	4
2. Dealing with possible abuses of the portability rules	9	11	8	12	2	8
3. Dealing with customers' complaints related to the Portability Regulation	17	17	7	4	0	5
4. Ensuring sufficient quality of services while user is not in his Member State of residence	11	13	12	9	0	5
5. Renegotiating contracts with rightholders	18	11	3	5	7	6
6. Dealing with the UK not being in the EU Single Market as of 30th of January, 2021.	12	11	4	8	5	10
Responses in AV sector (N=40)	1- not challenging at all	2- slightly challenging	3 – moderately challenging	4- challenging	5 – very challenging	I don't know/ can't answer
1. Verifying user's Member State of residence	11	8	10	8	2	1
2. Dealing with possible abuses of the portability rules	7	9	8	10	2	4
3. Dealing with customers' complaints related to the Portability Regulation	11	16	6	4	0	3
4. Ensuring a sufficient quality of services while user is not in his Member State of residence	6	12	10	9	0	3



5. Renegotiating contracts with rightholders	11	11	3	5	6	4
6. Dealing with the UK not being in the EU Single Market as of 30th of January, 2021.	7	10	4	7	5	7
<b>Responses in non-AV sectors (N=10)</b>	<b>1- not challenging at all</b>	<b>2- slightly challenging</b>	<b>3 – moderately challenging</b>	<b>4- challenging</b>	<b>5 – very challenging</b>	<b>I don't know/ can't answer</b>
1. Verifying user's Member State of residence	3	2	2	0	0	3
2. Dealing with possible abuses of the portability rules	2	2	0	2	0	4
3. Dealing with customers' complaints related to the Portability Regulation	6	1	1	0	0	2
4. Ensuring sufficient quality of services while user is not in his Member State of residence	5	1	2	0	0	2
5. Renegotiating contracts with rightholders	7	0	0	0	1	2
6. Dealing with the UK not being in the EU Single Market as of 30th of January 2021.	5	1	0	1	0	3

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 36. Q22.1 What do you think is the most challenging while complying with the Portability Regulation rules related to verification of a user's Member State of residence?**

<b>What do you think is the most challenging while complying with the Portability Regulation rules related to verification of a user's Member State of residence?</b>	<b>1- not challenging at all</b>	<b>2- slightly challenging</b>	<b>3 – moderately challenging</b>	<b>4- challenging</b>	<b>5 – very challenging</b>	<b>I don't know/ can't answer</b>
Using only the Member State of residence verification means listed in the Portability Regulation	7	3	5	6	0	2
Using a limited number of verification means (no more than two)	6	3	3	7	1	2
Being limited to verifying a Member State of residence only during the conclusion and the renewal of the contract and when there is reasonable doubt* about the current Member State of residence	6	3	7	2	1	3
Complying with personal data protection rules while verifying a Member State (e.g. deleting the data used for verification immediately after verification is complete)	5	1	6	4	3	3

Note: N= 23.

Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

**Table 37. Q23. What do you as an expert of the industry think about the impact of the Portability Regulation on the way service providers operate in the market and on the way that users make use of online content services? Please rate.**

<b>1. Portability Regulation's impact on the way service providers operate in the market</b>	<b>1- no or very minor impact</b>	<b>2 – minor impact</b>	<b>3 – moderate impact</b>	<b>4 – significant impact</b>	<b>5 – very significant impact</b>	<b>I don't know/ can't answer</b>
AV	2	8	13	8	3	6
Not AV	4	1	0	2	0	3
<b>2. Portability Regulation's impact on the way users make use of online content services</b>	<b>1- no or very minor impact</b>	<b>2 – minor impact</b>	<b>3 – moderate impact</b>	<b>4 – significant impact</b>	<b>5 – very significant impact</b>	<b>I don't know/ can't answer</b>
AV	5	7	7	7	7	7
Not AV	6	0	2	0	0	2

Note: N= 50 (AV – 40, not AV – 10). Source: Survey of online content service providers (2020 12 15 – 2021 03 26).

### Survey of national and European consumer organisations and relevant national authorities

The survey of national and European consumer organisations and relevant national authorities was open for responses starting from 21 December 2020 to 28 February 2021. Table 38 below provides some general information about the responses collected.

**Table 38. National and European consumer organisations and relevant national authorities survey responses breakdown**

Type of organisation	Invitations sent	Responses	Response rate
Consumer organisations	82	30 (from 22 EU countries, also 2 European organisations <sup>225</sup> )	36.6%
Data protection authority	32	10	31.2%

Source: Authors' own elaboration.

The results of the survey are integrated in the study findings and can be seen in the main body of the report. In addition, below we present aggregated answers to the entire survey questions report.

**Table 39. Q1. What is the status of your organisation?**

What is the status of your organisation?	Number of responses
National consumer organisation	11
Consumer protection authority	9
Other national authority directly in charge of monitoring application of the Portability Regulation	3
European /international consumer organisation	5
Data protection authority	10
Other, please specify:	2

Note: N=40.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 40. Q2. Are you aware of any of the following breaches of the Portability Regulation by certain service providers?/ Q5. Have you received any complaints from consumers related to how online content service providers apply the Portability Regulation?**

Are you aware of any of the following breaches of the Portability Regulation by certain service providers?/ Have you received any complaints from consumers related to how online content service providers apply the Portability Regulation?	Consumer orgs. (N=30)	Data protection authorities (N=10)
Yes	7	1
No	23	9

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 41. Q3. Please rank the frequency of the following types of breaches related to the Portability Regulation. (Question to data protection authorities)**

Type of breaches	1- none or very rare	2 - rare	3 - occasional	4 - frequent	5 – very frequent
1. Service providers collected disproportionate amounts of personal data when verifying the Member State of residence of the consumer (e.g. used more than two means of verification, determined the exact location of the consumer)	0	1	0	0	0
2. Service providers did not delete the personal data immediately after verification of the Member State of residence of the consumer	0	0	1	0	0

<sup>225</sup> Austria, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden.

3. Data collected during the verification of the consumer's Member State of residence procedure was shared with third parties (e.g. rightholders)	0	0	0	0	0
4. Service providers collect and/or store disproportionate information about the current location of the consumer (i.e. collecting and/or storing information of the exact location of the consumer instead of whether he/she is currently in the Member State of residence)	1	0	0	0	0

Note: N=1.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 42. Q3.1. Could you provide information or examples of how you have helped to address these breaches? Please select all options that apply. (Question to data protection authorities)**

How you have helped to address these breaches?/ Type of breaches (from Q3)	1	2	3	4
We informed consumers of their rights	1	1	0	1
We contacted service providers (investigating the case)	1	1	0	1
We referred cases to the lead data protection authority	0	0	0	0
We directed consumers to an alternative dispute resolution mechanism	0	0	0	0
We advised consumers to seek judicial redress	0	0	0	0
We filed a complaint in a court on behalf of consumers	0	0	0	0

Note: N=1.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 43. Q4. In your opinion, what impact did the Portability Regulation have on better addressing consumers' needs with regard to cross-border portability of the subscribed online content services?**

In your opinion, what impact did the Portability Regulation have on better addressing consumers' needs with regard to cross-border portability of subscribed online content services?	1- no or very minor impact	2 – minor impact	3 – moderate impact	4 – significant impact	5 – very significant impact	I don't know/ can't answer
Total number of responses (N=40)	1	5	7	11	2	14
Consumer orgs. (N=30)	0	4	6	10	2	8
Data protection authorities (N=10)	1	1	1	1	0	6

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 44. Q5.2. Please rank the frequency of the following types of breaches related to the Portability Regulation. (Question to consumer orgs.)**

Type of complaints	1- none or very rare	2 - rare	3 - occasional	4 - frequent	5 – very frequent
Issues related to availability of the service <sup>226</sup>	1	0	2	1	0
Issues related to unavailability of certain content or features of the service <sup>227</sup>	1	0	3	0	0
Issues related to verification of Member State of residence <sup>228</sup>	1	0	1	0	0

<sup>226</sup> Unavailability of the service when staying in another Member State despite having a good internet connection; Unavailability of the service when staying in another Member State after a certain period of time; Inability to access the service on certain devices; Other service availability issue, please specify.

<sup>227</sup> Problems with accessing a catalogue of the subscribed service while travelling (access to a different catalogue, or limited catalogue); Problems with using specific features that were available in the home country (e.g. subtitles, accessibility features for persons with disabilities, streaming function, features enhancing the consumer's experience); Other content or feature availability issue, please specify.

<sup>228</sup> Disproportionate information required in order to verify the Member State of residence (e.g. using more than two means to verify the Member State of residence, determining the exact location of the consumer); Verification of the Member State of residence more often than necessary (it is only necessary to verify the Member State of residence during the conclusion

Other issues with the application of cross-border portability <sup>229</sup>	0	0	0	0	0
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Note: N= 7.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 45. Q5.3. Could you provide information or examples of how you have helped to address these breaches? Please select all options that apply. (Question to consumer orgs.)**

How you have helped to address these complaints?/Type of complaints (from Q5.2)	1	2	3	4
We informed consumers of their rights	4	4	2	0
We contacted service providers (investigating the case)	1	3	1	0
We referred cases to the lead data protection authority	0	1	0	0
We directed consumers to another national authority	1	1	1	0
We directed consumers to an alternative dispute resolution mechanism	1	0	0	0
We advised consumers to seek judicial redress	0	1	0	0
We filed a complaint in a court on behalf of consumers	0	0	0	0
We contacted the Consumer Protection Cooperation Network	0	0	0	0
Other, please specify:	2	2	0	0

Note: N= 7.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 46. Q6. Is your organisation a part of the Consumer Protection Cooperation (CPC) Network? (Question to consumer orgs.)**

Is your organisation a part of the Consumer Protection Cooperation (CPC) Network?	Number of responses
Yes	19
No	9

Note: N= 28.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 47. Q6.1. In your view, how important is the CPC Network for effective enforcement of consumer rights for cross-border portability of the subscribed online content services? (Question to consumer orgs.)**

Importance of the CPC Network for effective enforcement of consumer rights for cross-border portability of the subscribed online content services	1- not important	2 – slightly important	3 – fairly important	4 - important	5 – very important
Number of responses	0	0	7	7	5

Note: N= 19.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 48. Q7. Has your organisation initiated any action under the CPC Regulation with regard to cross-border portability of online content services? (Question to consumer orgs.)**

Has your organisation initiated any action under the CPC Regulation with regard to cross-border portability of online content services?	Number of responses
Yes	19
No	0
No, but I am aware of other organisations that have	0

Note: N= 19.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

and the renewal of the contract and when there is reasonable doubt about the current Member State of residence); Incorrectly determined Member State of residence; Sharing of personal details obtained during verification of the Member State of residence with third parties; Other, please specify.

<sup>229</sup> Additional requirements to use cross-border portability; Increase in price for the service when using cross-border portability; Changes in service contracts/terms and conditions that were disadvantageous to consumers in terms of cross-border portability; Lack of information regarding the quality of the delivery of services under cross-border portability; Issues related to subscription, payment and payment methods; Issues related to consumer support; Other restrictions of using subscribed online content services, please specify.

**Table 49. Q8. Are there any specific enforcement measures in case of incorrect application of the Portability Regulation by a service provider in your country? (Question to consumer orgs.)**

Are there any specific enforcement measures in case of incorrect application of the Portability Regulation by a service provider in your country?	Number of responses
Yes	1
No	22

Note: N= 23.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 50. Q9. Is there an Alternative Dispute Resolution (ADR) body for settling contractual disputes between consumers and service providers with regard to the Portability Regulation in your country? (Question to consumer orgs.)**

Is there an Alternative Dispute Resolution (ADR) body for settling contractual disputes between consumers and service providers with regard to the Portability Regulation in your country?	Number of responses
Yes	17
No	6

Note: N= 23.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 51. Q10. Has your organisation carried out any mystery shopping exercise(s) to check whether service providers apply the Portability Regulation correctly? (Question to consumer orgs.)**

Has your organisation carried out any mystery shopping exercise(s) to check whether service providers apply the Portability Regulation correctly?	Number of responses
Yes	0
No	28

Note: N= 28.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 52. Q11. Has your organisation carried out any awareness campaigns concerning the Portability Regulation and/or surveys about consumer satisfaction with the Portability Regulation? (Question to consumer orgs.)**

Has your organisation carried out any awareness campaigns concerning the Portability Regulation and/or surveys about consumer satisfaction with the Portability Regulation?	Number of responses
Yes, we carried out awareness campaign(s) concerning the Portability Regulation	4
Yes, we carried out survey(s) about consumer satisfaction with the Portability Regulation	0
No	24

Note: N= 28.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

**Table 53. Q12. Have you received any complaints from consumers related to access of online content that is offered in a Member State other than their Member State of residence?**

Have you received any complaints from consumers related to access of online content that is offered in a Member State other than their Member State of residence?	Number of responses
Yes	5
No	23

Note: N= 28.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).



**Table 54. Q12.1. Please rank the frequency of the following types of breaches related to the Portability Regulation. (Question to consumer orgs.)**

Type of complaints	1- none or very rare	2 - rare	3 - occasional	4 - frequent	5 – very frequent
The service is not accessible at all to consumers from other Member States	1	1	0	0	1
Consumers could access the service but not the desired content	1	2	1	0	0
Consumers were redirected to the website of their Member State of residence	0	0	0	0	1
The website is available, but the payment method was refused	0	1	1	0	0

Note: N= 5.

Source: Survey of consumer organisations (2020 12 21 – 2021 02 28).

### Annex 3. Detailed results of mystery shopping exercise

This Annex corresponds to Task 2B of the Study. The aim of this task is to collect data and assess the practical impact of the Portability Regulation on customers. This involves the analysis of contracts between service providers and mystery shoppers and a mystery shopping exercise.

#### *Contract analysis*

In this section, we present the results from the contract analysis of the service providers selected for the mystery shopping exercise. In addition, we present the information service providers require from their subscribers. The analysis covered the registration process, the terms and conditions and privacy policy of 34 unique service providers selected for the mystery shopping exercise. This covers two free-of-charge service providers and 32 paid services.

First, we checked what information the service providers require during registration for their service. In most cases (13 out of 34) the **email address, name, surname<sup>230</sup> and billing information** were required. In addition, in five cases only the email address and billing information were requested. One service provider only requested the email address during the registration. It was one of the two free-of-charge service providers. Another free-of-charge service provider requested name and surname, email address, date of birth and zip code. The remaining paid service providers requested some additional information on top of what was already mentioned above: address, phone number, Google or Apple account, date of birth, gender. Some service providers even requested to verify the identity of the consumer with a mobile signature or through an e-banking system (1 service provider) or asked for the number of an ID or any other official document verifying the residence (1 service provider).

Second, in all of the cases, the **terms and conditions and privacy policy were separate documents**. We were not able to find the terms and conditions of one service provider. In all other cases, the terms and conditions were provided to the consumer during the registration process (they were usually available through a link during the registration). The privacy policy was also provided during the registration process in almost all cases, except for two service providers where the consumer has to find the privacy policy on the website of the service provider. Moreover, local service providers offer terms and conditions and the privacy policy only in local languages. The global service providers offer a variety of languages to choose from.

Third, in most cases the consumer agrees to the terms and conditions and privacy policy by registering to the service without explicitly ticking boxes (19 cases for terms and conditions and 21 cases for privacy policy). In 14 cases for terms and conditions and 10 cases for privacy policy, the consumer has to tick boxes. In two cases, the consumer does not have to agree to the privacy policy and in one case the consumer is asked to configure privacy settings during registration.

Furthermore, **a substantial number (17 out of 33) service providers do not mention the right to cross-border portability** in their terms and conditions. The remaining (16 out of 33) service providers mention the right to cross-border portability in their terms and conditions. In one of these cases, the right to cross-border portability is not explicitly mentioned in the terms and conditions, but the terms and conditions provide a reference to the FAQ article about cross-border portability. In almost all of the cases, consumers are informed that they can access services while being temporarily present in other EEA countries without defining the exact time of their temporary presence, as suggested by the Portability Regulation. Only one service provider's help centre article mentions that the customer will not have access to the content after 37 days abroad (although we could not confirm this during our mystery shopping exercise, see below). In addition, in one of these cases, the terms and conditions mention that the service is accessible worldwide to anyone with Internet access.

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<sup>230</sup> In 4 cases, a surname was not required, only a name.

Although 17 service providers do not provide information about cross-border portability in their terms and conditions, some of them (at least two) provide this information in the FAQ section (however, the terms and conditions do not refer to the FAQ in these cases). 10 of these 17 are global services providers. None of the music and book service providers analysed mention the right to cross-border portability in their contracts either.

In most cases (27 out of 34), the **means used to verify the Member State of residence is listed among the personal data collected by the service provider. However, they are not associated with verifying the Member State of residence or ensuring cross-border portability.** In these cases, the privacy policy outlines the data collected and the purpose for collecting it. However, it does not specifically mention verification of the Member State or ensuring cross-border portability as a purpose. In the remaining seven cases, either the terms and conditions or the privacy policy define the data collected and the means to collect data specifically for the purpose of verification of the Member State of residence. The following means are listed in these cases:

- IP address (mentioned in 6 cases)
- Telephone number (required to enter it and verify it) (mentioned in 3 cases)
- Payment details (mentioned in 1 case)
- Postal address (asked to enter it) (mentioned in 1 case)
- Information provided by a mobile or other device (mentioned in 1 case)

In 11 out of 33 cases, terms and conditions specify when the service provider verifies the place of residence of the consumer. The Member State of residence is verified:

- Only during registration (in 5 cases)
- At the conclusion and renewal of the contract, also if there is reasonable doubt about the Member State of residence (in 4 cases)
- At the conclusion and renewal of all of the subscriptions (in 1 case)
- During the registration and if there is reasonable doubt about the Member State of residence (in 1 case)

Finally, four of the service providers that do not mention the right to cross-border portability in their terms and conditions have clauses stating that the content and features may vary between countries and that the content or features may not be available in certain countries.

### ***Results of the mystery shopping exercise***

This section presents the results from the mystery shopping exercise. The mystery shopping exercise analysed the following questions:

- **Were the services provided in the same manner when used under portability?** We checked to see whether the services under portability allowed for the same functionality (e.g. subtitles and languages available), on the same type of devices and whether the catalogue of services was the same.
- **Were the services provided in the same quality?** We checked if the quality of services provided under portability was the same. The quality was measured by different parameters for different types of services: video (bit rate<sup>231</sup>, resolution), music (bit rate), game (bit rate, resolution, frames per second (FPS), ping<sup>232</sup>), e-books (bit rate, file formats available).
- **Were there any limitations or additional requirements to access the content under portability?** We checked whether service providers limited their services in any way, e.g. by

<sup>231</sup> The number of bits transmitted per second.

<sup>232</sup> The time that it takes for data to travel from your device to a central server and back to your device.

limiting the period of use during portability, asking for additional data to access the content, asking for additional payments).

During the mystery shopping exercise, we tested **39 online content services** (see Table 1 below for more details) from 12 EU and EEA countries (Belgium, Croatia, Czech Republic, France, Germany, Greece, Hungary, Lithuania, Norway, Poland, Spain and Sweden). The sample of countries was selected to represent Member States of different size, location and EU entry date as well as EEA countries. The Member State of residence for each service was assigned based on the availability of services in the countries. Additionally, for each Member State in the sample, approximately three services were tested<sup>233</sup>. The mystery shopping **service provider selection strategy** was based on a prioritisation of the service providers with the highest market share. This ensured that the service providers that are relevant for most Europeans were tested. Local service providers were either selected from countries where local service providers have a comparatively larger market share or from the main European markets in specific types of online content services (e.g. e-books). Small service providers that are not widely used were not tested due to the limited number of services tested. The services sample was selected based on the following criteria:

- **Type of content.** We ensured that our sample included services from the audiovisual (incl. sports), music, e-book and game sectors.
- **Type of service provider.** We ensured that the sample covered both paid and free access service providers, both large organisations and SMEs, both global and local service providers.
- **Business model of service provider.** We ensured that the sample covered both subscription and transactional services.
- We tested three service providers that **provide their services through a third party.**

The **countries of mobility** were selected based on the availability of the service in the country (there is a higher probability that portability is not provided in countries where the service provider has not launched its services) and ensuring a geographical balance (covering most of EU and EEA countries as countries of mobility). In addition, we aimed to select as countries of mobility those countries that would be less likely to offer the same content as in the country of residence (e.g. by choosing countries that speak different languages and that are not neighbours).

We tested each service provider with two devices. The devices and operational systems varied, thus covering the main devices (computer, tablet, smartphone<sup>234</sup>) and operational systems (Windows, Mac OS, Android, iOS, Linux). Devices were randomly assigned to the services, ensuring that each service would be tested with one mobile device and one computer. The proportions of devices used in the exercise were adjusted based on the device's usage statistics<sup>235</sup>.

We tested both **short-term** (illustrating cases when a citizen recurrently travels for a short period of time<sup>236</sup>) and **long-term** (illustrating cases when a citizen travels to one country and stays there for a longer period<sup>237</sup>) mobility. It is important to test both scenarios on the same service providers in order to have a picture of how both short-term and long-term mobility works with each tested service provider and thus have comparative results. This implies that **some service providers were tested in two ways**: for long-term mobility and for short-term mobility. We tested six service providers in this way to have a larger variety of unique service providers in the sample. For these service providers we selected four of the currently most popular global audiovisual service providers (Netflix, Amazon Prime Videos, Sky and HBO) and two local audiovisual service providers: one from the Nordic countries, as some local Nordic services compete with global service providers (Viaplay) and

<sup>233</sup> With the exception of Lithuania, as it was the Member State of residence during a pilot period when 6 service providers were tested.

<sup>234</sup> Smart TVs and game consoles are not included as they are not likely to be taken along while travelling.

<sup>235</sup> Statista data about the PC operating system market share worldwide, July 2020 (data for Europe was not available) and Mobile operating system market share in Europe, 2019.

<sup>236</sup> Short time refers to staying abroad for a couple of weeks (in our exercise, we imitated this stay for 2-3 weeks).

<sup>237</sup> In our exercise, a longer period refers to nine weeks.

one from Germany, as it has the highest number of video-on-demand (VOD) subscribers in the EU (Joyn Plus)<sup>238</sup>. The service providers that were tested for both long term and short term mobility are marked in bold in the table below.

The list of selected service providers, countries of residence and countries of mobility covered, testing devices, as well as the main findings are all presented in Table 1.

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<sup>238</sup> <https://www.statista.com/statistics/814639/ott-svod-subscribers-by-country-in-europe/>



## STUDY ON THE PORTABILITY REGULATION

**Table 1. List of services tested during the mystery shopping exercise**

No	Country of residence	Service to be tested	Type	Type of mobility tested	Country of mobility	Testing devices	Main findings
1	Belgium	RTBF	Local AV free-of-charge	Long-term	Bulgaria	Windows computer, Android mobile device	Asked to enable cross-border portability before using it; some content unavailable, but because of reasons not related to cross-border portability
2	Poland	TVP	Local AV free-of-charge	Long-term	Austria	macOS computer, Android mobile device	Some content unavailable because cross-border portability was not ensured. In addition, some content unavailable for reasons unrelated to cross-border portability
3	Belgium	Disney+	Global AV	Long-term	Estonia	Windows computer, Android mobile device	Not accessible on certain devices
4	Sweden	<b>Viaplay</b>	Local AV	Long-term	Slovakia	Windows computer, iOS mobile device	Some content unavailable, but because of reasons not related to cross-border portability
5	Norway	<b>Viaplay</b>	Local AV	Short-term	Greece, Lithuania <sup>239</sup> , Portugal	Windows computer, Android mobile device	Some content unavailable, but because of reasons not related to cross-border portability
6	Sweden	<b>Netflix</b>	Global AV	Short-term	Slovenia, Poland, Estonia	Windows computer, Android mobile device	No problems encountered
7	Norway	<b>Amazon Prime Videos</b>	Global AV	Short-term	Lithuania, Italy, Germany	macOS computer, Android mobile device	No problems encountered
8	Poland	Ipla	Local AV	Long-term	Spain	Windows computer, Android mobile device	Asked to enable cross-border portability before using it
9	Germany	<b>Joyn Plus</b>	Local AV	Long-term	Portugal	Windows computer, Android mobile device	No problems encountered
10	Germany	<b>Joyn Plus</b>	Local AV	Short-term	Spain, Ireland, Cyprus	Windows computer, Android mobile device	No problems encountered
11	Czech Republic	Voyo	Local AV	Long-term	Croatia	Windows computer, Android mobile device	No problems encountered
12	Lithuania	<u>GO3 (available through a third party)</u>	Local AV	Long-term	Italy	Windows computer, Android mobile device	No problems encountered
13	Croatia	Rakuten TV	Global AV	Long-term	Belgium	Windows computer, iOS mobile device	No problems encountered
14	France	<u>Disney+ (through a service of a third party (Canal+))</u>	Global AV	Long-term	Czech Republic	Windows computer, iOS mobile device	No problems encountered
15	Czech Republic	<b>Netflix</b>	Global AV	Long-term	Sweden	macOS computer, iOS mobile device	No problems encountered
16	Spain	Filmin	Local AV	Long-term	Denmark	Windows computer, Android mobile device	No problems encountered
17	Lithuania	<b>HBO (through a third party)</b>	Global AV	Short-term	Ireland, Belgium, Luxembourg	Linux computer, Android mobile device	No problems encountered
18	Croatia	<b>HBO</b>	Global AV	Long-term	Lithuania	Windows computer, Android mobile device	No problems encountered
19	Hungary	<b>Amazon Prime Videos</b>	Global AV	Long-term	Netherlands	Windows computer, iOS mobile device	No problems encountered

<sup>239</sup> Latvia changed to Lithuania, due to stricter Covid travel restrictions in Latvia. You could enter Lithuania if you had a negative Covid test, while you could not enter Latvia at the time the service was tested.

## STUDY ON THE PORTABILITY REGULATION

No	Country of residence	Service to be tested	Type	Type of mobility tested	Country of mobility	Testing devices	Main findings
20	Greece	Apple TV+	Global AV	Long-term	Germany	macOS computer, iOS mobile device	No problems encountered
21	France	Canal+	Local AV	Long-term	Czech Republic	Windows computer, iOS mobile device	Some content unavailable, but because of reasons not related to cross-border portability; not accessible on certain devices (only one time error)
22	Spain	DAZN	Global sports	Long-term	Germany	Windows computer, Android mobile device	No problems encountered
23	Germany	<b>Sky (sports package)</b>	Global sports	Long-term	Lithuania	macOS computer, Android mobile device	No problems encountered
24	Germany	<b>Sky (sports package)</b>	Global sports	Short-term	Lithuania	Windows computer, Android mobile device	No problems encountered
25	Poland	Eleven Sports	Local sports	Long-term	Greece	Windows computer, Android mobile device	Asked to enable cross-border portability before using it
26	Lithuania	Spotify	Global music	Long-term	Greece	macOS computer, iOS mobile device	No problems encountered
27	Hungary	Amazon music	Global music	Long-term	Netherlands	Windows computer, iOS mobile device	No problems encountered
28	France	Qobuz	Local music	Long-term	Norway	Windows computer, iOS mobile device	No problems encountered
29	Lithuania	Pakartot	Local music	Long-term	Spain	Windows computer, Android mobile device	No problems encountered
30	Germany	Thalia	Local e-book	Long-term	Romania	Windows computer, Android mobile device	No problems encountered
31	France	Youboox	Local e-book	Long-term	Hungary	Windows computer, Android mobile device	No problems encountered
32	Lithuania	Scribd	Global e-book	Long-term	Denmark	Windows computer, Android mobile device	No problems encountered
33	Spain	Kindle unlimited	Global e-book	Long-term	Finland	Windows computer, iOS mobile device	No problems encountered
34	Belgium	Kobo plus	Global e-book	Long-term	Cyprus	Windows computer, Android mobile device	No problems encountered
35	Sweden	Alphabet <u>Google</u> (Stadia)	Global game	Long-term	Portugal	Windows computer, Android mobile device	No problems encountered
36	Lithuania	Vortex	Local game	Long-term	Liechtenstein	Windows computer, Android mobile device	Some content unavailable, but because of reasons not related to cross-border portability
37	Norway	Sony (PlayStation Now)	Global game	Long-term	Malta	Windows computer, Android mobile device	No problems encountered
38	Germany	Magenta Gaming	Local game	Long-term	Iceland	Windows computer, Android mobile device	No problems encountered
39	Greece	Nvidia (GeForce NOW)	Global game	Long-term	Lithuania	Windows computer, Android mobile device	No problems encountered

Notes: 1) The service providers selected for both long and short-term mobility are shown in bold. 2) Service providers that were tested through the service of a third party are underlined.  
Source: Authors' own elaboration.

The mystery shopping exercise began in full scale on 12 December 2020 and ran until 19 February 2021 (this entails 9 weeks of using online content services under cross-border portability). In order to implement the mystery shopping exercise despite travel restrictions or bans applied due to the Covid-19 pandemic, we had to use a virtual private network (VPN) instead of travelling. We had mystery shoppers in each of the 12 countries to ensure that the targeted residence of the Member State is verified. Mystery shoppers used their own credit cards that are issued by a bank in the targeted Member State and an address in the targeted Member State to register for services. After registration, the VPN allowed them to manually set a location to any of the EU Member States by connecting to a local VPN server and imitate travelling in this way. In some cases, service providers blocked VPN servers. We solved this issue by buying an additional VPN service to ensure coverage of the necessary countries. However, in some cases, we had to change the countries of mobility to those in which we could physically be present to work around this issue.

The mystery shopping exercise was implemented in three steps (see also Table 2):

1. We accessed the content of the service in the Member State of residence and collected all of the necessary data. This data was used as the basis against which the data collected under cross-border portability was compared.
2. We attempted to access services imitating the location of the country of mobility through VPN twice a week for nine consecutive weeks.
3. After nine weeks of long-term mobility testing and after every 2-3 weeks in the short-term recurring mobility testing, we once again attempted to access services in the Member State of residence (see Table 2 for more details). The data of the final attempt was compared with the first attempt in the Member State of residence to see if there were any differences.

**Table 2. Steps for implementing mystery shopping**

Type of mobility/ week	1		2		3		4		5		6		7		8		9					
Long-term mobility	H	H	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	H	H		
Short-term mobility	H	H	A	A	A	A	A	A	H	H	A	A	A	A	H	H	A	A	A	A	H	H

Notes: H – testing services in the Member State of residence; A – testing services in country of mobility.

Source: Authors' own elaboration.

In total, each service provider was accessed 22 times (see Table 2). Hence, the mystery shopping exercise produced a database of 858<sup>240</sup> attempts to access services.

The way the services were tested varied by the type of content. Table 3 presents the specifics for testing services of the different types of content.

**Table 3. Specifics for testing services of different types of content**

Type of content	Specifics of testing the content
Audiovisual	We selected 10 movies/TV series/ channels/ shows. We selected content that is likely to be targeted at a local audience.
Sports	As live content is of the greatest importance for sports services, we selected 6 sports leagues.
Music	We selected 20 songs/podcasts. We selected content that is likely to be targeted to a local audience (e.g. songs in the local language).
E-book	We selected/bought 6 books and checked if they were available under portability without downloading them in the Member State of residence. We selected content that was likely to be targeted to a local audience (e.g. books in the local language).
Game	We selected 3 games.

Source: Authors' own elaboration.

The sub-sections below present the detailed results of the mystery shopping exercise.

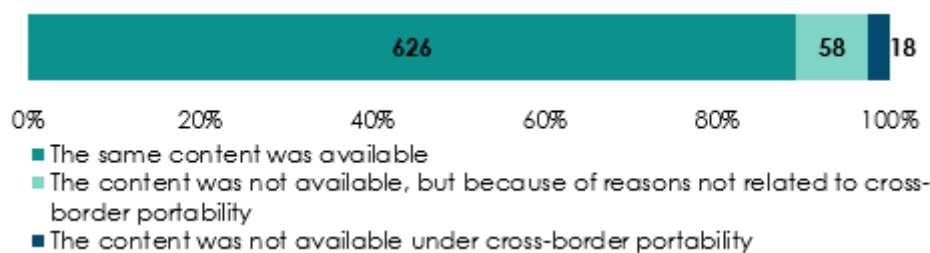
<sup>240</sup> Mystery shopping covered 39 services, hence 39\*22=556.

### Were the services provided in the same manner when used under cross-border portability?

Each time we were accessing services we collected data about the selected content as well as the subtitles and languages of this content. In addition, we tested each service with two different devices, thus we checked if there were differences in the way that services are provided on different devices. As mentioned earlier, we used the data collected under the attempts to access service in the Member State of residence (156 attempts) as a basis and compared the data collected under cross-border portability against it (702 attempts).

Firstly, in most cases (89% of attempts) the same content was available under cross-border portability as in the Member State of residence (see Figure 25). However, **in 3% of our attempts (all while accessing the same free-of-charge service provider) some of the content was not available under cross-border portability** but was available both at the beginning and at the end of the exercise in the Member State of residence. This shows that the content was not accessible because cross-border portability was not offered by this free of charge service (see Box 1 for more details). In addition, in 8% of our attempts some content was not available under cross-border portability, but that was due to reasons unrelated to cross-border portability. The content was also not available once accessed from the Member State of residence at the end of the mystery shopping exercise or was temporary inaccessible (see Box 1 for more details).

**Figure 1. Availability of content under cross-border portability during attempts to access services**



Source: Authors' own elaboration based on the results of the mystery shopping exercise.

#### Box 1. Examples of unavailable content

##### Unavailable content on free of charge services because cross-border portability was not ensured

A report by the European Audiovisual Observatory<sup>241</sup> mentions Polish national television TV Polonia (TVP) as a free-of-charge service provider offering cross-border portability<sup>242</sup>, thus, we tested TVP in our mystery shopping exercise sample. However, TVP does not offer cross-border portability in practice. Further, it does not mention cross-border portability in their terms and conditions or on their website. It may be the case that TVP does not offer cross-border portability anymore or that TVP meant that their paid service offers cross-border portability (TVP also has a paid service - 'Strefa ABO'). The Portability Regulation does not oblige free-of-charge service providers to offer cross-border portability. Hence, the findings below do not raise specific concerns regarding the application of the Portability Regulation.

Although part of their content is available under cross-border portability, some of their content tested (the series 'Czerwona Krolowa', 'Bankowa gra', the films 'Magiczne noce', 'Znachor', 'Mustang', 'Genesis 2.0') is not accessible abroad. The error message while trying to access this content states that the content is not available in the country you are currently in due to licencing. The content was available again once we tested it from the Member State of residence (Poland)

<sup>241</sup> Jiménez Pumares, M. (2019). First feedback from the implementation of the Portability Regulation by free online video services. European Audiovisual Observatory (Council of Europe), Strasbourg. Available online at: <https://rm.coe.int/first-feedback-from-the-implementation-of-portability-regulation-by-fr/168095f331>

<sup>242</sup> TVP also has a paid service 'Strefa ABO'. It may be the case that they meant this service is portable.

at the end of the mystery shopping exercise<sup>243</sup>. The remaining content tested (live TV, the series 'Ludzie i bogowie', 'M jak miłość', 'Matki, zony i kochani') was played without any errors.

#### **Unavailable content, but for reasons unrelated to cross-border portability**

The library of content of audiovisual service providers is being constantly updated. New content is introduced and at the same time, some content is removed. Some of the content selected for the mystery shopping exercise was removed: the films 'Deux fils' on Canal+, the films 'Mustang' and 'Genesis 2.0' on TVP, season 9 of the series 'Paradise Hotel' on Viaplay SE and NO, season 16 of the series 'Luksusfellen' on Viaplay NO, and older episodes of the series 'Demain nous appartient' and 'Feux de l'amour' on RTBF). In these cases, the content was not available both once accessed in the country of mobility after some time and once accessed from the Member State of residence at the end of the mystery shopping exercise. In most cases, the customer was informed about the expiration of the content at least a week in advance.

Cloud gaming provider Vortex sometimes puts games on maintenance. One of our selected games ('World of Tanks') was on maintenance 10 out of 22 times that we accessed this service.

Source: Authors' own elaboration based on the results of the mystery shopping exercise.

Secondly, the subtitles and languages of the content were the same as in the Member State of residence in all 702 attempts under cross-border portability. The same content with the same features was available regardless of the customer's location. This may be more of an issue for global service providers as they offer different subtitles in different countries and even have webpages in different languages based on the location of the subscriber. Some service providers deal with this by redirecting a customer to the webpage of his Member State of residence after logging in (e.g. Rakuten TV, DAZN). However, the majority of tested global service providers do not do that, but despite this, they provide the customer with the same language and subtitles as in the Member State of residence after logging in.

Finally, as mentioned earlier, we tested each service provider with two devices. Thus, during the entire mystery shopping exercise, we checked if there were any limitations or differences in the way content is provided when accessing services through a mobile device or computer. In total, we made 319 attempts under cross-border portability with mobile devices and 383 attempts with computers. This number is different, as some service providers offer their content only on computers (PlayStation NOW) or only on mobile devices (Kobo plus). In addition, after some time, the updated Sky ticket mobile application was not compatible with the device used for testing, thus all of the remaining accesses were made with a computer. We noticed cross-border portability related differences in only 10 attempts with a computer (see Box 2 for more details).

### **Box 2. Cases when a service was not accessible on a certain device**

#### **Disney+ unavailability on a computer web browser**

We tested the cross-border portability of Disney+ by accessing the service from a country where Disney+ is currently not available (Estonia). Although **Disney+** worked well on a mobile app it **was not accessible on a computer web browser**. When attempting to log in on the website, a page saying "Sorry, Disney+ is not available in your region" loads (**during all nine attempts** under cross-border portability). To ensure that it is not a VPN-related issue we tried to access the service without using a VPN and from multiple computers. We contacted Disney+ support about this issue and after trying various methods to access the page nothing helped. Interestingly, we also tested Disney+ through the service of a third party (Canal+). In that case, we did not experience any issues when using the service. This could be explained by the fact that Disney+ already had the website specifically designed for our country of mobility (Czech Republic) and thus the error about unavailability in the region was not shown, although Disney+ was still not available in that country.

<sup>243</sup> The films 'Mustang' and 'Genesis 2.0' were removed from the library during the mystery shopping exercise, thus they were not available.



We did not experience any issues when accessing Disney+ from a Member State of residence. It worked both through a web browser and a mobile device.

From a technical point of view, this situation could be explained by the fact that mobile devices and computers are typically served by different servers. Thus, somehow these different Disney+ servers have different geo-blocking set-ups.

#### **One time error to access Canal+ on a computer web browser**

Canal+ content was not available during one attempt to access services on the fifth week under cross-border portability. After logging in on the web browser no content was available, although the log in was successful and it was possible to check the account settings. In addition, the content was available on a mobile device. This was only a one-time error and all of the content was available during remaining accesses. The error could have been the result of a technical problem with the media server dedicated for computers. Logins and browsing for movies are always managed by servers different from the actual media content (the media content is usually what is served via a CDN provider). This explains why the page and the account settings were available, but the media content was not. In addition, mobile devices and computers are typically served from different CDN servers.

Source: Authors' own elaboration based on the results of the mystery shopping exercise.

### **Were the services of the same quality when used under cross-border portability?**

Each time while accessing services, we collected data about the available quality of the content. 18 service providers allowed us to choose or displayed the quality of their content. However, five service providers allowed us to choose the quality only from some devices (e.g. only from a computer or only from a mobile device), thus the total number of attempts where we checked quality under cross-border portability was 279. The quality was the same as in the Member State of residence in 96% of attempts (268 attempts). During the remaining 4% of attempts (11 attempts) the quality was different. This was the case while streaming GO3. Sometimes the series 'Gero vakaro šou' was available at a 5.5 Mb/s bit rate, while sometimes it was available at a 8 Mb/s bit rate. However, since this was not related to the streaming location or device, it was not an issue related to cross-border portability.

### **Were there any limitations or additional requirements to access the content under cross-border portability?**

During the entire mystery shopping exercise, we checked if there were any limitations or additional requirements to access the content under cross-border portability. After testing 39 service providers we have concluded that **the majority of service providers had not limited cross-border portability** of their services during the tested period. All music, e-book and game service providers ensured cross-border portability as we did not experience any issues related to cross-border portability while testing this type of service providers. With regard to audiovisual and sports service providers, we identified three service providers that **required us to enable cross-border portability** before using it by verifying the customer's address. Examples of these cases are presented in Box 3. Two of these service providers (Elevensports Poland and Ipla) require a customer to enable portability while still being in the Member State of residence, as otherwise, you get an error message asking you to log in with a Polish IP.

#### **Box 3. Cases when a service provider asked to enable cross-border portability before using it**

Some service providers require their users to enable cross-border portability before using it. This could be seen as a step to verify a customer's Member State of residence. However, this requirement by service providers might limit cross-border portability depending on how it is enforced. Here we analyse three separate service providers that require their customers to enable cross-border portability. We aim to assess if this requirement limits the right to cross-border

portability. The following three service providers required their customers to enable portability before using it:

- **Eleven Sports Poland** (Polish sports service provider) and **Ipla** (Polish audiovisual service provider). Both asked their customers to enable cross-border portability by entering their Polish phone number and verifying it by entering a code received to their phone. All of these steps have to be taken in the account settings. This has to be done while still being in Poland and does not work if the customer is already abroad. The customer is not explicitly informed about the need to enable cross-border portability in advance.
- **RTBF** (Belgian free-of-charge audiovisual service provider). To enable portability, the customer needs to enter his/her address and Belgian phone number and verify these details by entering a code received to his/her phone. All of these steps have to be taken in the account settings. It is possible to enable portability while already being abroad. After registration, the customer is encouraged to add more data about herself/himself and thus is advised to go to settings. RTBF does not explicitly ask a customer to enable cross-border portability, but this can be easily be seen once you are in your account settings. The verification of an address may be justified as during the registration the customer does not need to provide a full address, only a zip code is required.

From a customer's perspective, the key issue with requiring the enabling of cross-border portability is receiving timely and comprehensive information about the process. Otherwise, the customer might find herself/himself in a situation when she/he is not aware of the need to enable cross-border portability and would find out about this need only when trying to access content abroad. Out of the above-mentioned service providers, RTBF, properly informed customers about the need to enable cross-border portability. During the mystery shopping exercise, we noted the need to enable cross-border portability and did it immediately after registration. This was not the case with Eleven Sports Poland and Ipla, where we noticed the need to enable cross-border portability only when trying to access content from abroad. Thus, from a consumer's perspective, it would be important to have the ability to enable cross-border portability regardless of your current location (this was not the case for Eleven Sports Poland and Ipla). Otherwise, this puts a customer in a situation where she/ he cannot use cross-border portability if they have not already enabled this feature while still being in their home country.

Source: Authors' own elaboration based on the results of the mystery shopping exercise.

**We did not encounter any situations where cross-border portability was disabled after some time of using the services abroad.** Although the help centre article of one service provider did mention that the consumer may not have access to their content after 37 days abroad, we were not asked to log in from the Member State of residence after 63 days of using services abroad and were able to access the content. All of the problems mentioned above were observed immediately after virtually travelling to another Member State. With the exception of these problems, all service providers ensured cross-border portability thorough all nine weeks of virtually staying abroad. No differences between the way in which services were provided were observed while imitating long-term mobility (illustrating cases when a citizen travels to one country and stays there for a longer period<sup>244</sup>) and short-term mobility (illustrating cases when a citizen recurrently travels for short periods of time<sup>245</sup>).

## Conclusions

All music, e-books, game service providers and the majority of audiovisual and sports service providers tested during the mystery shopping exercise ensured cross-border portability, except for one free-of-charge service provider. We identified only a very few limitations to cross-border portability: the unavailability of content on some particular devices, one-time errors or requiring a customer to enable cross-border portability (in the home country) before using it. In addition, we did not encounter any situations when cross-

<sup>244</sup> In our exercise, a longer period refers to nine weeks.

<sup>245</sup> Short time refers to staying abroad for a couple of weeks (in our exercise, we imitated this stay for 2-3 weeks).

border portability was disabled after some time of using services abroad and have not noted any cross-border portability related differences both in terms of functionality and in terms of the available quality of services.

It is important to note that the paid service providers for the mystery shopping exercise were selected based on the prioritisation of the service providers with the highest market share. Thus, we can conclude that the most popular paid service providers do offer cross-border portability. Nevertheless, the data collected from the surveys and interviews suggest that some small service providers are not always aware of the Portability Regulation and do not apply it. However, we do not have hard evidence to support this as these service providers did not fall within the scope of the mystery shopping exercise.

#### Annex 4. Overview of government electronic identity schemes and whether they are made available to the private sector, including service providers for audio-visual content

#	Country	Private sector eID identification available? y = yes, n = no p = planned	Identity Service Description	Sources
1	Austria	y	Private sector eID use: Mobile Phone Signature <ul style="list-style-type: none"> <li>- Serves to provide identity evidence</li> <li>- Serves to create a legally valid signature in online procedures</li> <li>- Facilitates access to web services for both the private and public sectors</li> </ul>	<a href="#">Science Direct</a> <a href="#">Springer</a> <a href="#">Buergerkarte</a> <a href="#">Global Data Consortium</a>
2	Belgium	y	Use of eID in private sector: limited <ul style="list-style-type: none"> <li>- Regulated, strict use of the National Registration Number (RRN) providing no clear directions on the allowed use of eID data; RRN number indicates age and gender of citizens</li> <li>- Private sector is rarely allowed to use the eID due to the risk of abuse of data e.g. for direct marketing strategies</li> <li>- Selective reading of the RRN is not yet possible with current card readers</li> </ul>	<a href="#">Government eID software</a> <a href="#">Global Data Consortium</a> <a href="#">Springer</a>
3	Bulgaria	y	eID allows citizens to receive electronic services as a physical or legal person both in e-government and business.	<a href="#">Government eID</a>
4	Croatia	y	eID has functions equivalent to the functions of the European Citizens Card and is thus interoperable and fit for use in e-commerce at the national and European levels.	<a href="#">Government eID</a>
5	Cyprus	n	No use of eID in the private sector found.	<a href="#">Biometric update (news portal)</a>
6	Czech Republic	y	BankID enables digital interaction with the private sector and serves for digital interaction and signing transactions and documents.	<a href="#">Thales - services for governments</a> <a href="#">Deloitte</a> <a href="#">European Commission</a>
7	Denmark	y	NemID (eID) is used in the private sector among companies who adopted its use.	<a href="#">Government eID</a>
8	Estonia	y	eID (also Mobile ID or Smart ID) are used to safely identify citizens so that they can use e-services, including the private sector. Around 20 years ago, Estonia set up an X-road network that enables fast and secure data transfers via centrally decided protocols and data formats. The X-road can be used by the private sector as well.	<a href="#">Government eID</a> <a href="#">Biometric update (news portal)</a>
9	Finland	y	SisulD (eID) can be used to execute digital services such as payment, delivery of products or services or booking tickets. Service providers in the private sector can add SisulD as a login to their services. SisulD also provides verification at a physical service point or functions as a physical access token.	<a href="#">Government eID</a> <a href="#">SISUID (eID provider)</a>
10	France	p	The eID is planned to be launched in 2022 and will also be used by the private sector.	<a href="#">Thales - services for governments</a>
11	Germany	y	The eID (Personalausweis) issued to German citizens and resident permits (Aufenthaltstitel) issued to non-EU nationals living in Germany can be used for identity validation in the private sector, e.g. banks or insurance companies.	<a href="#">Government eID</a> <a href="#">Thales - services for governments</a>
12	Greece	p	Greece is planning to issue an eID in the first half of 2022. The eID will support the eIDAS technology standard and will also serve as an identification document and also as a key for online transactions within the private sector.	<a href="#">Ekathimerini (news portal)</a>
13	Hungary	n	No use of eID in private sector found.	<a href="#">European Commission</a> <a href="#">Government eID</a>
14	Ireland	n	No use of eID in private sector found.	<a href="#">Irish Council of Civil Liberties</a>

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#	Country	Private sector eID identification available? y = yes, n = no p = planned	Identity Service Description	Sources
				<a href="#">Government eID</a>
15	Italy	y	The eID (CIE) was developed within public open digital ID systems that enable public and private entities accredited by the Agency for Digital Italy to provide digital identity registration services. Acceptance of the eID is optional for the private sector (commercial and financial).	<a href="#">Government eID</a> <a href="#">Financial Action Task Force case study</a>
16	Latvia	y	Within a social network profile on Draugiem.lv, a user can use a self-service profile verification (authenticity check of one's digital personality) by the use of an eID with an active electronic signature. Other examples of eID usage in the private sector include access to <a href="http://www.manabalss.lv">www.manabalss.lv</a> , which is a portal of civic initiatives and the Jūrmala City Hospital.	<a href="#">European Commission (1)</a> <a href="#">European Commission (2)</a>
17	Lithuania	y	Mark ID solution is a face recognition solution and identity verification and e-signature gateway for the Baltic States. The solution works on a device with an embedded camera where a user takes a selfie or a short video of his or her face and the government provided eID.	<a href="#">Government eID</a> <a href="#">Lithuania startup (news portal)</a>
18	Luxembourg	y	eID is used in the private sector together with the e-signature function. The eID is provided by the national trust services provider LuxTrust and technology provider Cryptomathic.	<a href="#">Government eID</a> <a href="#">Nexus (ID management firm)</a>
19	Malta	n	No use of eID in the private sector found.	<a href="#">Government eID</a>
20	Netherlands	y	eID (DigilD) consist of a username a password used as a code to enable the use of digital services also in the private sector. In addition, some entities link DigilD to an SMS code as an additional security measure. On February 18,2020, the government issued the Digital Government Act supporting digitalisation. The Act provides citizens with the possibility of using the eID in the same way as they use their passport in the private sector.	<a href="#">Expats portal</a> <a href="#">Connective (ID management firm)</a> <a href="#">Innopay (digital transactions firm)</a>
21	Poland	y	(2017) After introduction of the eID, the next step is to introduce the use of eID in additional to government areas including telecoms, stores, service and content providers and financial institutions.	<a href="#">Government eID</a> <a href="#">Cryptomathic (tech firm)</a> <a href="#">Government Observatorium (news portal)</a>
22	Portugal	y	The eID is designed to be used by private (and public) entities. It enables remote citizen identification and the use of a legally valid digital signature.	<a href="#">Zetes (government services firm)</a> <a href="#">Government eID</a>
23	Romania	n	No use of eID in the private sector found.	<a href="#">Security Document World (news portal)</a>
24	Slovakia	n	No use of eID in the private sector found.	n/a
25	Slovenia	p	It is planned to introduce an eID by August 2021. It will also be used in the e-commerce sector. The eID enables proving an identity and to benefit from a digital signature service.	<a href="#">European Commission Biometric Update (news portal)</a> <a href="#">Government eID</a> <a href="#">Total Slovenia (news portal)</a>
26	Spain	p	The use of an eID is at the discretion of the private sector. Illustrations: - The eID update is expected for big utilities firms (i.e. water, electricity)	<a href="#">Caixa Bank (financial organisation)</a> <a href="#">ResearchGate</a>



#	Country	Private sector eID identification available? y = yes, n = no p = planned	Identity Service Description	Sources
			<ul style="list-style-type: none"> <li>- Banks can leverage the eID for the withdrawal of money, order a bank transfer, request a credit card, modify personal data</li> <li>- The launch of a single digital identity model that leverages blockchain technology which is self-managed by the end user is on its way. The solution was expected to be launched in May of 2021. It will enable the end user to have their data validated by other authorised organisation to, for instance, hire a car or arrange for a loan.</li> </ul>	<a href="#">Metropolitan (news portal)</a>
27	Sweden	y	Private sector illustrations: <ul style="list-style-type: none"> <li>- BankID is an electronic identification solution to confirm the identity of citizens for various services, e.g. internet or mobile banking services, online payment services</li> </ul>	<a href="#">Statista (statistics firm)</a> <a href="#">Government eID</a>

Source: Authors' own elaboration based on sources identified in the table.

## Annex 5. Lists of survey respondents

*Respondents of the online content service provider survey*

No	Name of service	Sector
1	A1 Xplore TV GO	Audiovisual
2	Amazon	Overarching (representing at least two sectors)
3	AntennaPod	Music or podcasts
4	Apple	Overarching (representing at least two sectors)
5	BeIn	Sports
6	Blacknut	Games
7	CineMember	Audiovisual
8	Danish Broadcasting Company (DR)	Overarching (representing at least two sectors)
9	Das Erste Mediathek	Overarching (representing at least two sectors)
10	Deezer	Music or podcasts
11	Disney+	Audiovisual
12	eBooks	E-books and/or Audiobooks
13	Euroleague TV	Sports
14	Film Arkivet	Audiovisual
15	Filmin	Audiovisual
16	Filmmit	Audiovisual
17	Ganso y Pulpo	E-books and/or Audiobooks
18	Go3	Audiovisual (films/TV series) and Sports
19	Groupe Canal+	Audiovisual (films/TV series) and Sports
20	GuideDoc	Audiovisual
21	IFFR Unleashed	Audiovisual
22	Jamendo	Music or podcasts
23	KIXI	Audiovisual
24	KPN Videothek Thuis	Audiovisual
25	LaCinetek	Audiovisual
26	Liberty Global	Audiovisual (films/TV series) and Sports
27	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual (films/TV series) and Sports
28	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual (films/TV series) and Sports
29	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual
30	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual
31	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Overarching (representing at least two sectors)
32	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Games
33	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Overarching (representing at least two sectors)
34	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Overarching (representing at least two sectors)
35	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual
36	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual
37	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Audiovisual
38	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	E-books and/or Audiobooks

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39	NA, as the answer was collected through a link shared by stakeholder organisations and the respondent did not provide the organisation name	Music or podcasts
40	Netflix	Audiovisual
41	NLZiet	Audiovisual (films/TV series) and Sports
42	Nowo Videoclube TVOD	Audiovisual
43	PICKBOX NOW	Audiovisual
44	Post Luxembourg VoD Katalog	Overarching (representing at least two sectors)
45	Proximus TV	Audiovisual (films/TV series) and Sports
46	Rai Play	Overarching (representing at least two sectors)
47	Resonate	Music or podcasts
48	RTBF Auvio	Overarching (representing at least two sectors)
49	RTE Player	Audiovisual
50	RTL Play (Belgium)	Audiovisual (films/TV series) and Sports
51	RTV	Audiovisual (films/TV series) and Sports
52	RUUTU	Overarching (representing at least two sectors)
53	Sky	Audiovisual (films/TV series) and Sports
54	Spotify	Music or podcasts
55	Telenet Play and Yelo Play	Audiovisual (films/TV series) and Sports
56	Telia Lietuva	Audiovisual
57	The Candy Shop	AV content production
58	Vialma	Music or podcasts
59	Vivacom	Overarching (representing at least two sectors)
60	Vodafone Videothek (DE)	Audiovisual
61	Yousee	Overarching (representing at least two sectors)
62	ŽMONĖS Cinema	Audiovisual

### *Respondents of the national and European consumer organisation and relevant national authority survey*

No	Country	Organisation name
1	Austria	Verein für Konsumenteninformation
2	Bulgaria	Асоциация Активни потребители (Bulgarian National Consumers' Association)
3	Croatia	Unija potrošača Hrvatske
4	Cyprus	Commissioner for Personal Data Protection
5	Czech Republic	Česká obchodní inspekce
6	Czech Republic	Ministry of Industry and Trade - Legislation Department (NIMIC - SOLVIT Centre) (CPC - SLO)
7	Czech Republic	Office for Personal Data Protection
8	Denmark	Forbrugerombudsmanden
9	Estonia	Andmekaitse Inspektsioon
10	Estonia	Tarbijakaitse ja Tehnilise Järelevalve Amet
11	European	Bureau Européen des Unions de Consommateurs (BEUC)
12	European	European Data Protection Board
13	Finland	Kuluttajaliitto-Konsumentförbundet ry
14	France	UFC - Que Choisir
15	Germany	European Consumer Centre Germany
16	Germany	Bundesministerium der Justiz und für Verbraucherschutz (BMJV)
17	Greece	EKPIZO
18	Iceland	Persónuvernd
19	Ireland	Coimisiún um Iomaíocht agus Cosaint Tomhaltóirí, Competition and Consumer Protection Commission
20	Ireland	Data Protection Commission
21	Italy	Altroconsumo
22	Italy	Autorità per le Garanzie nelle Comunicazioni (AGCOM)
23	Italy	CPC Italy
24	Latvia	Data State Inspectorate
25	Latvia	Patērētāju tiesību aizsardzības centrs
26	Lithuania	European Consumer Centre Lithuania
27	Lithuania	State Data Protection Inspectorate
28	Lithuania	Valstybinė vartotojų teisių apsaugos tarnyba
29	Malta	Awtorità ta' Malta dwar ilKommunikazzjoni, Malta Communications Authority
30	Malta	L-Awtorità Maltija tal- Kompetizzjoni u tal-Affarijiet tal-Konsumatur, Malta Competition and Consumer Affairs Authorit
31	Netherlands	Consumentenbond

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32	Poland	Urząd Ochrony Konkurencji i Konsumentów (UOKiK)
33	Portugal	Deco
34	Romania	The National Supervisory Authority for Personal Data Processing
35	Slovakia	Ministerstvo hospodárstva SR - odbor ochrany spotrebiteľa
36	Slovakia	Office for Personal Data Protection of the Slovak Republic
37	Slovakia	Slovenská obchodná inšpekcia
38	Slovenia	Ministrstvo za gospodarski razvoj in tehnologijo (NIMIC - SOLVIT Centre)
39	Spain	Organizacion de Consumidores y Usuarios - OCU
40	Sweden	Konsumentverket

## Annex 6. Lists of interviewed organisations

### Interviewed rightholder organisations

No.	Sector	Country	Title
1.	Film producers and distributors	Europe	Federation of European Film Directors (FERA)
2.	Film producers and distributors	Europe	European Film Agency Directors
3.	Film producers and distributors	Europe	International Federation of Film Producers' Association
4.	Film producers and distributors	Europe	European Producers Club (EPC)
5.	Film producers and distributors	Europe	European Audiovisual Production Association (CEPI)
6.	Film producers and distributors	Europe	Europa Distribution - European Network of Independent Film Publishers and Distributors
7.	Film producers and distributors	Europe	International Federation of Film Distributors Associations (FIAD)
8.	Film producers and distributors	Europe	Eurocinema
9.	Sport organisations	Europe	UEFA Champions League and UEFA Europe League
10.	Sport organisations	Europe	Sports Rights Owner Coalition (SROC)
11.	Music producers and publishers	Europe	The Independent Music Companies Association
12.	Overarching	Europe	European Grouping of Societies of Authors and Composers
13.	Book publishers	Europe	Federation of European Publishers
14.	Games publishers	Europe	European Games Developer Federation

### Interviewed consumer organisations

No	Organisation	Country
1.	European Consumer Centre Austria	Austria
2.	European Consumer Centre Belgium	Belgium
3.	Bulgarian National Consumers' Association	Bulgaria
4.	European Consumer Organisation (BEUC)	European
5.	European Consumer Centre Germany	Germany
6.	Competition and Consumer Protection Commission (CCPC)	Ireland
7.	European Consumer Centre Italy	Italy
8.	European Consumer Centre Lithuania	Lithuania
9.	European Consumer Centre Poland	Poland
10.	Agency for communication networks and services of Republic of Slovenia (AKOS)	Slovenia
11.	Organization of Consumers and Users (OCU)	Worldwide

### Interviewed service providers

No	Organisation	Sector
1.	A1 Xplore TV GO	Audiovisual
2.	Aerovod	Audiovisual
3.	Amazon	Overarching (representing at least two sectors)
4.	AntennaPod	Music
5.	Apple	Overarching (representing at least two sectors)
6.	BBC	Audiovisual
7.	BeIN Sports	Sport
8.	Blacknut	Games
9.	Cablenet View on Demand	Audiovisual
10.	Canal+	Overarching (representing at least two sectors)
11.	Danish Broadcasting Company	Overarching (representing at least two sectors)
12.	Deezer	Music
13.	EUScreen	Audiovisual
14.	Jamendo	Music
15.	Kixi Entertainment	Audiovisual
16.	KPN Videotheek Thuis	Audiovisual
17.	La Cinémathèque des Réalisateurs	Audiovisual
18.	Le Meilleur du Cinéma	Audiovisual
19.	Libertyglobal	Audiovisual



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20.	Netflix	Audiovisual
21.	Nlziēt	Overarching (representing at least two sectors)
22.	Nonfiction.film	Audiovisual
23.	Proximus	Audiovisual
24.	Rai	Overarching (representing at least two sectors)
25.	Resonate	Music
26.	RTE Player	Audiovisual
27.	Sala Virtual De Cine	Audiovisual
28.	Sky	Overarching (representing at least two sectors)
29.	Spotify	Music
30.	Telenet Play	Audiovisual
31.	Telia	Audiovisual
32.	Tet (Lattelecom)	Overarching (representing at least two sectors)
33.	TV3 Play	Audiovisual
34.	Vialma	Music
35.	Vodafone	Audiovisual
36.	YouBoox	E-books
37.	YouSee	Overarching (representing at least two sectors)
38.	Žmonēs Cinema	Audiovisual

## GETTING IN TOUCH WITH THE EU

### In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

### On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by email via: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

## FINDING INFORMATION ABOUT THE EU

### Online

Information about the European Union in all of the official languages of the EU is available on the Europa website at: [https://europa.eu/european-union/index\\_en](https://europa.eu/european-union/index_en)

### EU publications

You can download or order free and priced EU publications at: <https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)).

### EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all of the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

### Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free for both commercial and non-commercial purposes.

