

BEREC Public Consultation on the data economy

4 October, 2018

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INTRODUCTION AND OBJECTIVES

In recent years data has become a key resource for companies, civil society and governments. Advances in technologies, such as communications, computing, storage and software engineering, have allowed for cost reductions in data processing and storage, leading to the progressive incorporation of different economic actors into the data economy. This has also led to an exponential increase in data generated by consumers, private and public entities and, more recently, objects (the IoT).

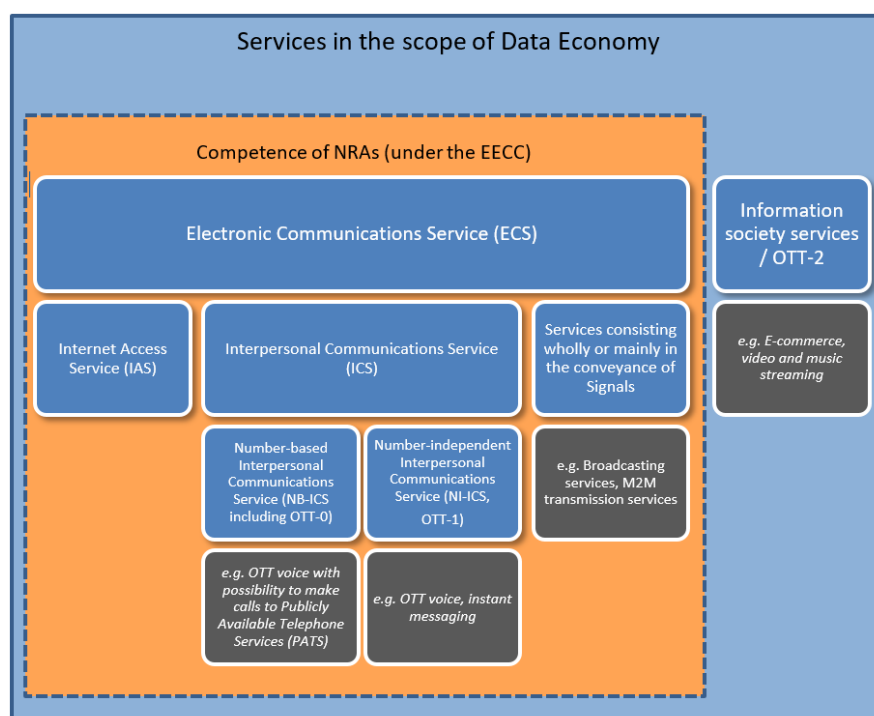
The increasing availability of data and the development of tools to collect and analyse data is changing a large portion of the economy, enabling innovative business models, cost reductions, more informed decisions by consumers, institutions and firms, and increased economic growth. All societies, including Europe, should ensure that firms, institutions and citizens are ready to take advantage of the vast potential of this strategic asset.

Meanwhile, the EU Telecommunications Policy Package is expected to be replaced in January 2019 by the EU Directive on the European Electronic Communications Code (EECC). The amended definition of electronic communications services in the EECC includes Over-The-Top communications services (OTT-0 and OTT-1) in the scope of the Directive as "number independent interpersonal communications service", thus widening the definition significantly.

For questions regarding the use of personal data, the General Data Protection Regulation applies, unless overriding sector-specific data protection rules are applicable.

The sector-specific data protection rules in the telecommunications sector are currently included in the Privacy and Electronic Communications Directive (2002/58/EC). They will eventually be replaced by the EU e-Privacy Regulation, which will then apply directly in the member states and will not need to be transposed into national law.

The following figure depicts the services in the scope of the data economy in relation to the future competences of National Regulatory Authorities (NRAs) according to the EECC.



Taking this into account, BEREC considers that it is important to study the impact of the data economy on the electronic communications sector that is under its regulatory scope, as well as considering the role that NRAs could play in the context of the data economy. Essentially, BEREC is interested in deepening its knowledge of how the data economy could affect its traditional line of work (both in terms of reshaping Electronic Communications Markets and in terms of the tools that can be used by NRAs to conduct their regulation activity) and how BEREC could contribute to the development of the data economy.

With this aim, BEREC has carried out some preparatory meetings with academics and stakeholders, including a workshop in June 2018, at which NRAs' Heads and various relevant actors took part. Following on from this, BEREC will prepare a report to be published in mid-2019.

As part of the preparatory tasks, BEREC has prepared this call for input with the aim of getting insights from all types of actors (consumers, companies in the telecommunications sector, digital companies, other companies, institutions) on issues to be taken into account by NRAs in the context of the data economy, as well as ideas on where the experience of NRAs can be used, in collaboration with other regulatory bodies, to encourage the development of the data economy. Specifically, BEREC is interested in the following issues that are addressed in the different sections of the public consultation:

1. **General issues regarding the data economy to be taken into account by BEREC.** This comprises issues such as the definition of the data economy, a taxonomy for the data that is used and its general economic properties, as well as identifying bottlenecks for the development of the data economy.
2. **Electronic Communications Networks (ECNs) and Services (ECSs) as enablers for the data economy.** Telecommunications networks are the “base structure” which enables data flows and, as such, this infrastructure is key to facilitate the transition towards a data-driven economy in Europe. BEREC is interested in the characteristics and future evolution of ECSs, as provided for in the monitoring and review obligation stemming from article 114a of the draft EECC, but also in order to ensure that consumers, companies and institutions benefit from the opportunities associated with the data economy.
3. **Impact of the data economy on competition in ECS markets.** Like most sectors of the economy, the telecommunications sector is affected by the data economy, and the use of data could be an important factor affecting the dynamics of competition in ECS markets. Furthermore, the new EECC provides a wider definition of ECS that encompasses OTT-0 and OTT-1¹. This broader scope includes actors who are in principle even more involved in the data economy: for example the business models of OTT-0 and OTT-1 service providers often involves commercialising data instead of billing users for their services. BEREC is interested in getting stakeholders' views on how the use of data in the provision of ECSs is changing competition in the communications sector. Furthermore, BEREC would also like to get an overview of the issues to be taken into account when performing market analysis on ECS markets that are linked to the development of the data economy.

¹ As defined in the BEREC report on OTT services (BoR (16) 35, January 2016). Those are the OTT services that provide voice-over-IP services and/or instant messaging services.

4. **The data economy in NRAs' regulatory activity.** NRAs can also benefit from the tools developed in the context of the data economy in order to take well-informed regulatory decisions and they can also share part of their data with the public. BEREC is interested in proposals from stakeholders that can be applied within the scope of its regulatory activity, for instance relating to the sharing of data and the application of data analytics in order to enhance regulatory decisions and to help consumers, companies and other institutions to optimise their decisions in a more informed context, in line to what is expected from institutions in the 21st century.
5. **NRAs' regulatory experience applied to the data economy.** BEREC is also interested in getting feedback in relation to potential collaboration with other regulatory bodies (e.g. data protection authorities) that could be of help in the field of the data economy. In this regard, BEREC would like to know if the methodologies and experience developed by NRAs could be of use in the context of the data economy. In particular, BEREC is interested in knowing whether its experience could be of help in the context of the data economy regarding:
- Monitoring the evolution of markets;
 - Assessment of market power and the potential need for regulation;
 - Application of ex-ante regulation (whether this is symmetrically applied to all actors or applied only to the dominant player);
 - Development of portability schemes that aim to reduce switching costs for consumers;
 - Supervision of standardisation for interoperability, with the aim of maximising network effects;
 - Promotion of the development of wholesale access markets.

Once BEREC has received all stakeholders' responses to this consultation, a report summarising their input will be published on the BEREC website. The contributions will be used in the preparation of the final report.

INSTRUCTIONS FOR SUBMITTING FEEDBACK

Timeline and target group of this consultation

This consultation runs from the 10th October 2018 to the 21st November 2018 (closing date). It is open to the wide range of public and private stakeholders involved in the data economy, as well as to their associations. We welcome contributions from all actors that are interested in the data economy, namely:

- Public organisations, including local, national, or international organisations (e.g. data protection authorities, competition authorities, government authorities, intergovernmental organisations, non-governmental organisations, etc.);
- Industry actors: online platforms, media and social media companies, online content providers, online advertisers, providers of Electronic Communications Networks (ECN) and providers of Electronic Communications Services (ECS, as defined in the EECC), operators that are active along the value chain of the Internet of Things (IoT), players active in data collection or data processing, software developers, producers of smart devices, and any other industry players active in the data economy;
- Industry associations and networks;

- Consumers and consumers' associations;
- Academics, specialised research centres, think tanks, etc.;
- Financial investors;
- Any other stakeholder or citizen(s) with expertise/interest in the data economy.

Instructions for submitting your response and transparency provisions

Please provide your answers preferably in English and in PDF and/or Word format. Respondents are not required to answer all sections and questions, although BEREC invites stakeholders to submit contributions that are as complete and detailed as possible.

All non-confidential contributions to the consultation will be published on the BEREC website shortly after the end of the consultation period. Please indicate if any part of your response should be treated as confidential. Alternatively, you can provide a non-confidential version of your response.

Responses should be addressed to PC_Data_Economy@berec.europa.eu by 14.00 (CET) on the closing date, 21/11/2018. Late responses will not be considered.

Please provide the name (and website, if available) of your organisation, as well as the contact information (name, e-mail and/or phone number) for a contact person. In the case of personal contributions, please provide your name, nationality and contact information.

Name of the organisation/person, website, nationality and contact information

The Law Society of Scotland (Transparency Register ID: 80169287043-57)

<https://www.lawscot.org.uk/>

United Kingdom

Please contact: Carolyn Thurston Smith (carolythurstonsmith@lawscot.org.uk)

Please indicate the place(s) of operation of your organisation and the sector(s) in which your organisation mainly operates. Please explain how you are involved in the data economy.

Place of operation, sector(s), involvement in the data economy

Main operations in United Kingdom

Legal services, law reform and policy

Legal services are evolving with the data economy. Our members involved in all aspects of advice relating to the data economy and we are interested in issues around regulation of the data economy, including in relation to competition, consumer protection, data protection and privacy.

1. GENERAL ISSUES

The collection and analysis of data is not, by any means, a new phenomenon, as it dates back to the development of statistics. However, the Internet offers immediate access to information that can put data into context. The ability to track a huge variety of events, with a high level of detail, generates raw data in an unprecedented way that can be collected and transformed into valuable information. More specifically, the combination of raw data and analytical tools can reveal patterns, provide key insights. The generation and collection of data and its analysis, as well as the exchange of newly generated information, may pave the way for creating new business opportunities.

Question 1.1:

The term 'Data Economy' tries to capture the increase in the availability of data, the related business opportunities and the (potential) social value of the insights that can be generated. According to the EC report "Building a European Data Economy"², the *"data economy measures the overall impacts of the data market – i.e. the marketplace where digital data is exchanged as products or services derived from raw data – on the economy as a whole. It involves the generation, collection, storage, processing, distribution, analysis, elaboration, delivery, and exploitation of data enabled by digital technologies"*.

Do you agree on this general definition of the Data Economy? If you have an alternative definition or any comments on the proposed definition, please provide details below.

Answer to question 1.1

The general definition of the Data Economy set out above seems sensible. However, we consider that it might not be sufficient as a legal definition. More generally, we note the difficulties of defining terms where the underlying concept is constantly evolving.

Question 1.2:

Data is an essential input to many newly emerging services. However, it is hard to assess the individual value of a single piece of data. It might be also considered that, in the context of the data economy, a single piece of data has a negligible value by itself and, therefore, data will start generating added value only when a significant amount of information is processed and structured in a meaningful manner. Insights derived from data, and thus its value, depend on the quality and reliability of data, as well as its ability to be combined with other data. Inherently, larger amounts of data tend to allow more far-reaching insights. The marginal cost of collecting digital data can also be particularly low (if not negligible); therefore, substantial economies of scale can be present. Moreover, the utilisation of data can lead to the provision of better services, and thereby increase the number of users, which in turn can generate even

² Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Building a European Data Economy" {SWD(2017) 2 final. Brussels, 10.1.2017 COM(2017) 9 final

more data to be collected. Thus, the data economy is often associated with strong network effects, even sometimes leading to “winner–takes-all” situations.

Data has sometimes been referred to as the “new oil”, but a key difference is that data is non-rivalrous in consumption. That is, the same data about a consumer can be made available to many different companies, rather than only being used once: e.g. data on date of birth, gender, home address, telephone number, credit card details, etc. Even though data is essentially non-rivalrous, it cannot be regarded as a pure public good in economic terms because people or companies may be excluded from using it. For example, some types of data may be specific to a particular platform and can also be made exclusive through commercial or technical means.

Data is not a homogenous good and there are different types of “data” (e.g. personal and non-personal). Different types of data will in turn have different values to different types of businesses, as the value of data depends on its context and is affected by four key characteristics: volume, velocity, variety and veracity. For instance, the volume of data may be important when looking to establish patterns in consumer behaviour in aggregate. Conversely, the velocity of data – how quickly its usefulness depreciates – is more relevant to services that promote products based on what users are currently searching for.

In your opinion, what are the most important characteristics of data to be taken into account when analysing its economic properties? Are there elements missing in the previous list?

Answer to question 1.2

It may also be helpful to consider the intangible nature of data and the fact that data is usually stored in electronic form. This allows it to be transferred with relatively few logistical considerations in comparison with physical goods. It also poses challenges in relation to security.

Question 1.3:

Different types of data can be distinguished and a taxonomy of data is useful to structure the analysis of the data economy. For example, one common distinction is that between personal and non-personal data. BEREC would be interested in respondents’ input regarding more detailed or alternative classifications that can be made, especially those that are more relevant in relation to the analysis to be done by BEREC.

What classification of data do you consider to be most relevant (in the context of BEREC work on the data economy)? Please elaborate below.

Answer to question 1.3

Personal data as defined in the GDPR relates to an identifiable individual. It is important to recognise that non-personal data in this context, ie where it has been successfully anonymised, may therefore still relate to eg, the behaviour or health of individuals. Ownership of, or access to, this type of non-personal data could result in negative consequences for the individuals whose data is being used, as well as providing potential advantages.

Beyond this there are a range of other categories of non-personal data, which it may be helpful to consider in constructing a framework for consideration of data issues. Examples include public sector information, commercial data, scientific data (which may also have commercial uses); environmental information etc. The extent to which it is helpful to consider categories or sub-categories may depend on the relevant context.

Question 1.4:

The ability to access data may be important in terms of reinforcing existing network effects in certain circumstances. As a result, there may be concerns about the exercise of market power in online markets and the ability of firms with market power to foreclose or restrict competition. For instance, concerns could include:

- exclusive control of certain data that creates a significant barrier to entry;
- leverage of market power into adjacent markets;
- lack of competition over non-price features, e.g. privacy.

Which kind of competition concerns are likely to be of relevance in the data economy?

Answer to question 1.4

We have no comment on this question.

Question 1.5:

Do you think that competition issues regarding the power of market data can be sufficiently addressed by current competition law and the upcoming regulatory framework (EECC, GDPR, e-Privacy Regulation, PSI Directive, etc.)?

Answer to question 1.5

The EECC, GDPR, and e-Privacy Regulation, while overlapping with competition law issues to some extent, are aimed at fulfilling a different objective from competition law. It is unsurprising therefore, that in and of themselves they do little to address competition issues.

As we have commented elsewhere, digital markets pose a number of potential competition issues including: the detail of comparing like with like; algorithmic decision-making; price fixing; the emergence of intermediaries for data and questions around where transaction power lies from a competition perspective; and behaviour in online market places. A further issue arises in terms of the increasing overlap between providers or agents for providers, for example a platform which offers a marketplace for other sellers while also offering goods or services in its own right. Across the board, we note that it can be difficult to ensure transparency in complex situations, although as a general rule, we consider that the current system works reasonably well.

Generally speaking we believe that competition law as such is fit for purpose to deal with new technologies – ie collusion by an algorithm is collusion just the same. One of the strengths of competition law is that the principles-based nature of the regime gives greater flexibility to deal with changing markets. However, there are still difficulties in terms of enforcement in evolving markets: an issue which could be dealt with by competition law may still be missed or the

competition law relevance may be overlooked. The key question in fast moving markets is time taken to run complex cases – by the time decision is reached and litigated, the market has moved on. Fast-tracking or creation of nimbler enforcement tools could be helpful in this context.

There is also an inherent difficulty in less obvious cases as competition investigations and enforcement usually focus on past conduct. Often a particular action or behaviour will only be prohibited after an incidence of it has already occurred.

In both these scenarios the speed of decision-making in enforcement cases is a central consideration. While there may be advantages to fast-track decision-making in certain cases, there is a danger that pushing through cases too fast could erode the rights of the defence. On the other hand, significant delays can allow businesses to continue exploiting an advantage or gaining further market share. In this respect powers to take interim measures can have a positive effect. A possible solution would be to focus on changes the balance of risk, recognising the role of competition law in managing change while guarding against anti-competitive practices and ensuring protection of consumers.

2. ECS AS AN ENABLING FACTOR FOR THE DATA ECONOMY

Electronic communications services (ECS) are an enabling factor for the data economy, as they provide the infrastructure upon which the data economy is developing. For data to be collected and distributed everywhere, networks must be ubiquitous, reliable, interoperable, secured and offer high speed transmission. Therefore, the development of ECS should both directly and indirectly support the growth of the data economy.

ECS providers can also develop innovations and new services that will allow them to play a new role in the data economy, going further than being the infrastructure on which the data economy relies. Some telecommunications network providers already offer services such as cloud storage and analytics solutions, which actors in the data economy can use to develop their businesses, but telecommunications network providers can also directly participate in the data economy by developing data-based services of their own. For example, they may offer mobile network location-based services. Moreover, with the development of the Internet of Things (IoT), ECS providers are enabling connectivity to billions of devices that can collect data.

This creates an opportunity for ECS providers to play a major role in the collection and analysis of a large volume of data. With the following set of questions, BEREC intends to identify the services and innovations provided by ECS providers that contribute to the development of the data economy.

Question 2.1:

Services provided by network operators can be assessed based on various parameters (latency, bandwidth, reliability, security, ubiquity, etc.). Considering that the development of the data economy is supported among others by the electronic

communication networks, which parameters are the most relevant for the development of the data economy in your view?

Answer to question 2.1

We have no comment on this question.

Question 2.2:

What more can ECS providers do to help the development of the data economy? Conversely, do you identify any bottlenecks for the development of the data economy that are related to ECS providers and, if so, what, in your view, could be done to address this issue?

Answer to question 2.2

We have no comment on this question.

Question 2.3:

What kind of evolution do you foresee regarding the role of ECS providers in the value chain? For example, with regard to the development of the Internet of Things or mobile network location-based services, could new revenue models for ECS providers emerge based on the data economy?

Answer to question 2.3:

Any new revenue model using data such as IoT data is likely to have serious privacy issues as processing involves identifying a purpose(s) subsequent to obtaining the results of analysis. Conventional processing is based on a predetermined purpose. Quite simply, with 'big data', it is not always possible to foresee what could be discovered about an individual or set of individuals. This will therefore need very careful regulation.

3. IMPACT OF THE DATA ECONOMY ON COMPETITION IN ECS MARKETS

The provision of electronic communication networks and services generates a significant amount of data that, in some cases, cannot be obtained by other sources. The availability of processing this data might create some opportunities for telecommunication operators. For instance, data can potentially be used to improve the services provided to the users, gain internal efficiencies, deliver innovative services, create new business models or, in the cases and conditions allowed by privacy regulation, commercialise this asset.

A distinction can be made between network or infrastructure data on the one hand and content or usage data on the other hand.

Data related to the network itself are of great relevance in optimising the network operations of telecommunications operators³. Analysis of this type of data can help to make network operations more efficient.

Telecommunications operators can also benefit from the analysis of usage data. For example, customer loyalty and churn can be examined with data analytics methodologies. The aim could be, for example, to identify the factors affecting churn and, based on these findings, take action to reduce it over time. Another area where data analytics could be of use is fraud detection. Consumers could also benefit from innovative products and services based on data collection and analysis. The development and implementation of smart home services, for example, could improve safety, energy efficiency and comfort.

The growing importance of data collection and analysis may also affect competition in the telecommunications sector. For example, ECS providers with a large number of customers could possibly benefit from economies of scale in terms of data collection and analysis. Moreover, some ECS providers are vertically integrated across different levels of the value chain and might thus benefit from economies of scope, as they act both as network operators in the fixed or mobile network and as service providers at wholesale and retail level. A telecommunications company with a broad product portfolio, for instance encompassing fixed network services, mobile services, IPTV or even Smart Home services, can collect significantly more data than those providing just stand-alone services, which it can then use to better serve their customers and optimise their business operations while reducing costs. Overall, having access to a wide variety of data may facilitate innovation or optimisation when combined with data analytics techniques. ECS and data services (such as cloud computing) may also be combined to make new service proposals that could affect competition dynamics.

With regard to mobile services, it should be noted that network operators have exclusive access to additional network data compared to resellers or MVNOs. Therefore, a question may arise about whether network operators are able to extend their advantages from (exclusive) data collection and analysis to other areas.

Instant messaging services and voice over IP (VoIP) services have been widely adopted by consumers and are increasingly competing with traditional telecommunications services, such as SMS or voice telephony. The Privacy and Electronic Communications Directive (2002/58/EC) established ECS sector-specific data-protection rules. This Directive will be replaced by the EU e-Privacy Regulation, which will then apply directly in the member states and will not need to be transposed into national law.

Question 3.1:

What is the significance of data for the telecommunications value chain today? How would you expect this significance to change in the future?

Answer to question 3.1

Customer/consumer access to and “ownership” of their own data is becoming a more accepted concept, by legislators, regulators and industries. This principle is at the forefront of the financial services second payments services directive, PSD2, and allows customers, where they have given their informed consent, to transfer their data between providers. This

³ For example, the analysis of topography data for planning network deployment can help increase the range and transmission capacity of mobile radio base stations.

principle is also being adopted in other sectors. A notable lead is Australia, where the Government, following a report from the Australian Productivity Commission, is introducing the 'Consumer Data Right', to allow consumers to access their data. This can include transaction, usage and product data. This also provides for the right for consumers to require the transfer of their data to others. This right is being introduced in the first instance in banking, energy and telecommunications.

The motivations behind the introduction of these concepts and rights is that incumbent operators have been able to benefit from their privileged access to their customers' data. By removing this privilege and enabling customers to share their data with others, more parts of the market can be opened to competition. This principle would appear to apply in telecoms as any other market, as evidenced by the reforms being introduced in Australia.

The same concept of data ownership is apparent in the Right to Data Portability of the GDPR, which is not sector specific. This has a clear requirement for interoperability.

There could also be benefit of extending this concept further such that data held by firms should be open and available to other operators to aid competition at various levels of the value chain. Such an extension would also need to consider issues around privacy and data security.

Question 3.2:

How are ECS providers making use of (anonymised) data? Are they buying/selling it from/to third parties? Please elaborate.

Answer to question 3.2

We have no comment on this question.

Question 3.3:

Are you aware of cross-sectoral initiatives carried out by ECS providers with regard to data analytics? Please provide examples of (big) data analytics projects/initiatives carried out by ECS providers⁴.

Answer to question 3.3

We have no comment on this question.

Question 3.4:

What is your view on how the use of data (including the combination of data services and ECS) may change the competition dynamics among ECS providers? Do you see any risk of leveraging market power, or conglomerate effects caused by the use of data

⁴ As defined in the EECC, including providers of OTT-0 or OTT-1 services.

in the telecommunications sector? If so, should the methodology to assess market power be reviewed to further consider access to data?

Answer to question 3.4

As identified above, large volumes of data can provide commercial advantages. These could in turn have an impact on competition dynamics among ECS providers. It would seem appropriate to consider how this ties in with assessments of market power in the ECS sector as in all sectors.

Question 3.5:

Are there cases in which exclusive ownership of data or other potential hurdles related to data restrict competition or the development of new telecommunications business models? Please provide examples. Below are some specific examples of cases that may be of interest to BEREC:

- **Do you see any competitive differences with regard to data collection and analysis between MVNOs and MNOs?**
- **Do you see any competitive differences with regard to data collection and analysis between fixed line infrastructure operators and retailers that rely on wholesale access?**
- **Do you see any competitive differences with regard to data collection and analysis between “traditional” ECS and OTT-0/OTT-1 providers?**

Answer to question 3.5

We have no comment on this question.

Question 3.6:

What opportunities and/or risks do you see for consumers linked to an increase in data collection and analysis in the telecommunications sector?

Answer to question 3.6

There may be benefits for consumers if data collection and analysis facilitates more tailored offerings, or improves service levels generally. However, tailored offerings, which are often claimed by marketers to be in the interest of consumers, are often not perceived in the same way by the consumers themselves.

The GDPR does address the issue of behavioural advertising. There could also be benefits in terms of market structure, for example facilitating market entry and enabling the unbundling of services. However, we note that there may be risks to consumers eg if data analysis suggests that a particular offering is less profitable, which results in this service being withdrawn or a premium being charged.

Risks around issues such as data privacy and security will also need to be mitigated. This can include ensuring that there is a robust and proportionate approach to issues such as informed consent, where a customer chooses to share their data, with this implemented in a way as to not confer undue benefit to incumbent operators. There will be a need a clearly articulated requirement for robust Data Protection Impact Assessments.

4. NRAs' ECS REGULATORY ACTIVITY IN THE CONTEXT OF THE DATA ECONOMY

The emergence of the data economy is characterised not only by an increase in the quantity of data available, but also by the availability and use of data analysis tools (e.g. Apache Hadoop, SAP HANA, etc.) that are capable of analysing rapid real-time flows of data. These new data and tools can greatly influence how NRAs take regulatory decisions.

The use of data in increased quantity and quality by NRAs, combined with new analytical tools, may have the potential to significantly improve the quality of regulatory decisions in various aspects (e.g. consumer protection and empowerment, fostering competition and investment, monitoring the quality of services and network deployment/coverage and the assessment of market power).

Furthermore, in the context of an evolution towards an open government data ecosystem, defined by the re-use of public sector information (PSI) Directive⁵, NRAs could have a significant role in contributing to the economic and social benefits that may be possible. In fact, the electronic communications sector alone is responsible for vast amounts of data being generated/collected and the nature of such information may allow for significant benefits beyond its use for strict regulatory purposes.

This section therefore addresses the dimensions of the relationship between NRAs and the data economy in the context of NRAs' duties and responsibilities, as established by the new European Electronic Communications Code (EECC) and the proposal for a revised BEREC Regulation.

In adapting to the data economy, NRAs should consider how to leverage data in order to enhance the quality of their work, their decisions and the accuracy of regulatory analysis (e.g. market definitions or market power assessments) as a step towards "data-driven" regulation (increased use of available relevant data).

With the increasing volumes of data generated by customers and operators, the quality of data used by NRAs – not only existing internal data but also data that can be collected from operators (respecting existing principles, such as proportionality) – can also be improved. Additionally, data collected and generated by NRAs (when not subject to confidentiality clauses and when their publication is allowed by national legislation), may also be useful for different actors in the digital economy.

⁵ Directive 2013/37/EU of the European Parliament and the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information, as well as proposal for a directive of the European Parliament and of the Council on the re-use of public sector information (Brussels, 25.4.2018). COM(2018) 234 final 2018/0111 (COD)

Question 4.1:

What is your view on how NRAs can use data to better perform their duties (e.g. consumer protection, fostering competition, monitoring the quality of services and network deployment/coverage, the assessment of market power...)? Can the use of digital tools improve the capacity for action? If that is the case, please provide further explanation, as well as any proposals you may have.

Answer to question 4.1

NRAs and competition authorities have always used data to fulfil their duties. The emerging issue over the last few years has been the vast amounts of data that are now available. This data enables firms to compete in new ways, developing products, services and prices to better meet customer needs, but also to act in ways to undermine competition and produce detrimental consumer outcomes.

In recent years NRAs and competition authorities have been developing their expertise in this area, to use data in their investigation and enforcement work. For example, in the UK the Competition and Markets Authority (CMA) has this year established its Data, Technology and Analytics unit, with a key part of its remit being to consider how to develop its machine learning and artificial intelligence capabilities to be used across its case work. It is also developing capability within the CMA to better understand how firms are using data and whether there is a need for action. NRAs and competition authorities should explore opportunities to develop best practice in these important emerging areas to ensure there is sufficient capability across markets.

Question 4.2:

What kind of data, or which specific data, should NRAs collect and publish which could facilitate the development of the data economy?

Answer to question 4.2

We have no comment on this question.

Question 4.3:

Under the new EECC (art. 22) NRAs shall conduct surveys on NGN deployment, including relevant information on operators' intentions to invest (planned network deployments, upgrades and extensions) and QoS parameters.

When this information is not available in the market, NRAs shall also make data from the geographical survey available and easily accessible to allow for its re-use (when not subject to confidentiality). Such data may be particularly useful for end-users as it can support their choices (e.g. allowing them to check for connectivity options in different areas).

Regarding this provision, which relevant data (and to what level of detail) should NRAs collect (e.g. as QoS metrics) and which techniques could be applied, both in collecting data and in making it available to end-users?

Answer to question 4.3

We have no comment on this question.

Question 4.4:

The PSI Directive set the framework for the re-use of public sector information, as part of an open data policy, recognising it as a major opportunity to stimulate innovation, economic growth and social engagement, adding value to users and the society in general.

Along the same line, the draft reviewed BEREC Regulation⁶ includes a mandate to BEREC to enforce an open data policy. According to this provision, BEREC shall “*promote the modernisation, coordination and standardisation of the collection of data by NRAs. Without prejudice to intellectual property rights, personal data protection rules and the required level of confidentiality, this data shall be made available to the public in an open, reusable and machine-readable format on the BEREC website and the European data portal.*”

Intensified by digitisation, the amount (and types) of public data has vastly increased. Both businesses and citizens now expect data within the scope of the PSI Directive to be online, readily available under non-restrictive conditions and easy to understand.

How can NRAs and BEREC contribute to increasing the availability of data in the spirit of the PSI Directive and the reviewed Regulation? In your opinion, what specific data should NRAs and BEREC publish (e.g. QoS indicators, consumer complaints, coverage, usage statistics)?

Answer to question 4.4

We have no comment on this question.

5. NRAs’ EXPERIENCE APPLIED TO THE CASE OF THE DATA ECONOMY

The data economy is governed by different regulatory instruments that address various aspects, such as the protection of personal data (the General Data Protection Regulation), re-use of public sector information (the PSI Directive), guidance on private sector data sharing, the free flow of non-personal data and e-Privacy, among other issues.

However, the data economy and regulations on access to data are in general not in the regulatory scope of NRAs in the electronic communications sector. This does not necessarily imply that there is no role for NRAs with regard to issues in the data economy. As addressed in previous sections of this public consultation, many sectors are involved in the data economy. In this respect data economy concerns the economy as a whole. The impact of the data

⁶ Article 2 of the Proposal for a Regulation of the European Parliament and of the Council establishing the Body of European Regulators for Electronic Communications. Inter-institutional File: 2016/0286 (COD).

economy on competition dynamics for ECSs should be considered and ECSs are a key enabling factor for the data economy.

For their part, NRAs have gained considerable experience from monitoring ECS markets, analysing them and designing remedies to encourage competition and investment. Although different to data markets, there could nonetheless be synergies to be harnessed from NRAs' experience gained on ECS markets which may be useful in the context of encouraging competition and investment in the data economy.

In this context, BEREC is interested in areas where the experience of NRAs could be useful in addressing potential issues in the development of a data-based society in the future. As of today, powers on the data economy for NRAs are very limited as they are focused on ECS markets, however it can be useful for BEREC to envisage potential future areas where NRAs could share their experience to help the development of the data economy, such as:

- Monitoring the evolution of the data markets
- Encouraging the development of wholesale markets for access to data.
- Fostering interoperability obligations (to maximize network effects while weakening winner takes all effects) and data portability (e.g. oriented towards reducing consumers' switching costs when moving from one digital ecosystem to another)
- Fostering transparency and non-discrimination (concerning either just the dominant players or all players).

BEREC is therefore interested in collecting views from all actors on the potential need for the above mentioned tools in the context of the data economy. This could be in the short, medium and/or long-term, with the aim of addressing any potential bottlenecks for investment and competition that may not be sufficiently covered under ex-post competition law.

Question 5.1:

Do you consider the competitive conditions in data economy-related markets are optimal for the development of the data economy? For example, do you consider that there are efficient data-sharing mechanisms in place?

Answer to question 5.1

We have no comment on this question.

Question 5.2:

If you consider that the competitive conditions in data economy-related markets could be improved, which of the potential tools measures (along the lines of the ones listed in the introduction to this section) would, in your view, be appropriate to foster the development of the data economy? Please also explain if you consider such tools to be ineffective or if you consider that they could even harm the data economy's development.

Answer to question 5.2

One observation we would make is the potential importance of interoperability and the development of standards to enhance the competitive conditions in a market. Where open

data is being used as a policy tool to enhance competition, a lack of interoperability and standards can act as a barrier to entry. An example of where this has been considered is in the development of Open Banking in the UK. This was implemented by the CMA and required the largest providers of bank current accounts in the UK to develop a standardised approach to enable customers to share their current account transaction data with third parties – through the development of common, standard, open application programming interfaces (APIs). This approach ensures that third parties can deploy a single, common API to link with banks, reducing their market entry costs, providing greater choice and variety of innovation to customers. Such interoperability is consistent with and required by the GDPR.

Question 5.3:

Do you see the need for closer cooperation between the NRAs (that have a regulatory focus on ECSs) and other regulatory bodies, such as data protection authorities, competition law authorities (National Competition Authorities, which usually focus on ex-post regulation), consumer protection authorities or other bodies, on issues related to the data economy (such as data portability, market power assessments, merger control, rules on the treatment and sharing of data, etc.)? Please specify the area of potential collaboration, the roles that could be played by NRAs, within their competence, and which regulatory body or institution to collaborate with.

Answer to question 5.3

One issue which we have considered in the UK domestic context is the number of sector regulators and the roles they play. There are issues of consistency and as they are tasked with protecting the same consumers, have similar objectives and often raise similar themes, there would be benefits from coordinating efforts and ensuring a more joined-up approach. This principle can be applied in the wider EU context: shared learning between NRAs and NCAs can provide benefits across the board.

Question 5.4:

In relation to data markets, which are the key issues that should be taken into account when assessing competition dynamics? What should be the geographical scope for data markets (national/European/international/other) and what drivers should be taken into account?

Answer to question 5.4

We have no comment on this question.

Question 5.5:

In general, how can NRAs contribute to address competition/regulatory issues in order to foster the transition to a data economy?

Answer to question 5.5

We have no comment on this question.

Question 5.6:

Is there any other issue in relation to the application of NRAs' experience to the data economy that you would like to add?

Answer to question 5.6

We have no comment on this question.

6. OTHER ISSUES

This section covers any other issues that have not been addressed in previous sections/questions and which stakeholders consider to be of potential interest to NRAs in the context of the report that will be prepared by BEREC.

Question 6.1:

Is there any additional issue not included in previous questions that you would like to address? For the sake of classification, please, differentiate between:

- 1) Issues in relation to ECS regulation under the powers for NRAs in the new Electronic Communications Code;**
- 2) Areas where NRAs or BEREC could collaborate with other public bodies or organisations in the context of the data economy when applying existing regulation for the data economy; and**
- 3) Any additional issue relevant for NRAs that is not addressed in the existing regulation applicable to ECSs and/or the data economy.**

Answer to question 6.1

We have no comment on this question.