

# **BEREC Public Consultation on the data economy**

GSMA Response

# **QUESTIONS**

# 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, which can be collected and transformed into valuable information. More specifically, the combination of raw data and analytical tools can reveal patterns, and 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", 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

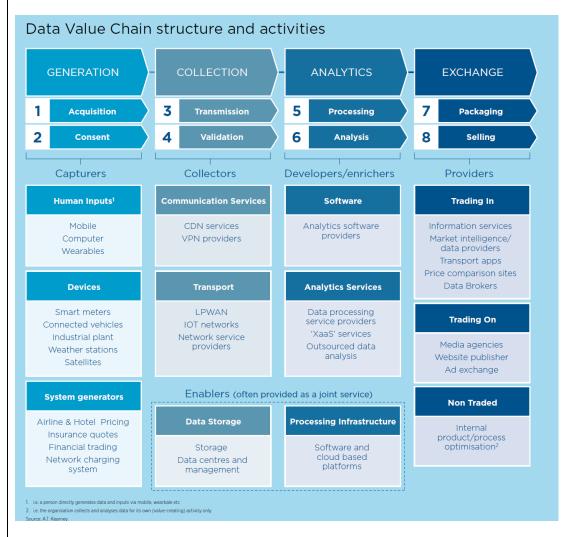
Since the purpose of defining such a term is unclear, it is not possible to comment only if the definition is appropriate – appropriateness depends on the purpose pursued. A definition of data economy may serve any number of purposes, and depending on the purpose and context, it may be relevant to emphasize different moments of reality. The definition of the data economy could encompass different things, from the whole economy in a mature information society to a sector, market, or value-chain.

The GSMA notes that the quoted definition by the European Commission provided the context for the Commission's Data Strategy Communications, which had a broad objective. It was not, and cannot be, the starting point for a proper analysis of the competitive conditions of markets

<sup>1</sup> 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



for data-driven product and services. It can however be useful to put together a broad picture of the markets for data-driven product and services. In that respect, our recent study on the Data Value Chain<sup>2</sup>, shows that, a broad definition, coupled with a value chain framework, can help to make sense of the workings of the data economy<sup>3</sup>. The figure below shows the result of applying a data value chain framework to the data economy, and the resulting organisation of activities along the more conventional lines of how production is organised in different stages.



Source: The Data Value Chain, GSMA study, Figure 3

All the layers identified above are horizontal, although their relevance differs from one sector to another. In some areas, data collection and use are intensive and shape competition. For example, maps and advertising cannot be isolated from data gathering and analytics. It is worth noting as well that economies of scope determine that data gathered in some sectors can be of relevance at the analytics layer in another sector. Much has been said, for example, of how data gathering in online services makes it possible for digital players to enter markets where data analytics is important. Banking and finance is a good example.

<sup>&</sup>lt;sup>2</sup> https://www.gsma.com/publicpolicy/the-data-value-chain

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy



Last, but not least, it needs to be considered that data-related markets tend to be broader than traditional telecom markets thus, they could, at least in part, exceed the existing competences of NRAs.

# **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 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

GSMA's Data Value Chain study, included an in-depth consideration of the key characteristics and dimensions, or classification, of data, which address this and the next question. The text below reports the key points that are relevant here. For an in-depth discussion of the different characteristics and dimensions, we refer you to Part 1, page. 9 to 15, of the GSMA Data Value Chain study.



The study notes that data is a **unique economic good**. Many associate data with abundance but this is misleading. Instead, the matter is one of variety – with an enormous number of scarce or even unique pieces of data. As a form of intangible asset, **data shares characteristics with several other kinds of capital good, but combines them into a distinctive mix unlike any other asset**. The figure below shows the key dimensions that can combine to create a unique characterisation of the different types of data. Moreover, it is also quite important, when evaluating the usage of data, to also take into account the business context in which data are used (i.e. B2B and/or corporate context vs B2C context) as this will strongly influence the types of uses and ultimately the value of the relevant data.

#### Key dimensions and data types

Dimensions	Data Types			
Personal	Volunteered	Obse	erved	Inferred
	Private		Public	
	Identified		Pseudonymised	
Non-Personal	Anonymous		Machine Data	
Timeliness	Instant/Live		Historic	
Format	Structured		Unstructured	

Source: The Data Value Chain, GSMA study, Figure 1

### **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

See our answer to the previous question, which address both points. It is important to base any taxonomy of data on the two fundamental legal categories: personal data or non-personal data. Flowing from this, and aside from the technical definitions relating to dimensions and the corresponding types of data, it should be noted that data as an economic good can relate either to a private input (by analogy a capital good/asset, or intermediary good used in the production of digital services or in the production of other enriched data); an output (data being transformed and enriched through combination with other information and through software processing); or a currency (in the frame of two-sided intermediary platforms, when data is being transferred in exchange for zero-monetary price digital services). Creating new legal



categories of data should be avoided as this could result in greater fragmentation and legal uncertainty. However, distinctions should be drawn between data which a customer chooses to port from one data controller to another, and data which the customer has not chosen to port.

#### **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

At this point in time, the EECC is being adopted and BEREC, together with the NRAs, is facing the forthcoming complex 2-year long national transposition process, which will require intensive BEREC's work when issuing many guidelines to the NRAs. Therefore, we respectfully suggest to take a sustainable approach by focusing BEREC's and NRAs' limited resources on getting the EECC appropriately implemented, before considering any move on to the new areas that could or should possibly fall under the scope of sector-specific regulation.

The GSMA considers that the global economy is undergoing a major transformation and that the progressive take-up of new, disruptive technologies and business models are changing both the nature of products and services and the way people interact with them. This transformation is changing the way companies compete. As a result, competition in digital markets presents features that are amplified and/or differentiated versions of competition issues which are already present in some traditional markets:

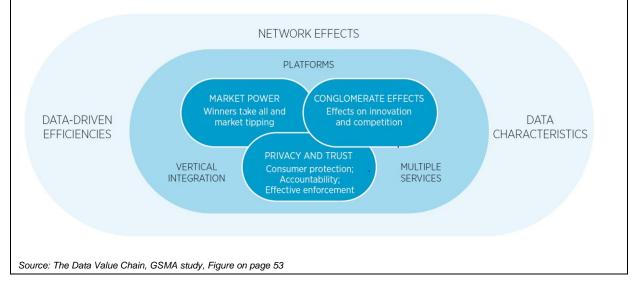
- Economies of scale and strong direct and/or indirect network effects dominate, often leading to "winner takes all" market outcomes, with one multi-sided platform having built entrenched dominant position;
- -Switching costs and lock-in effects on the user side, which provide additional room for manoeuvre to (already large) online platforms to behave independently from competition;
- -Central role of platforms, induced and enhanced by the multi-sided nature of most digital markets and their related properties; in addition, the privileged position of platforms to leverage and exploit the differences between the needs and preferences of different groups of users based on information which is collected by the platform;
- -The productive use, by these platforms, of data gathering and data analysis on a large scale, to create and strengthen their market power, which has the potential to cause anticompetitive effects, especially in markets where data and data analytics are crucial to the quality of the services offered to one or more groups of customers; and



-Stronger and growing interactions between data protection rules and competition law enforcement especially as: (i) data protection standards become a parameter of competition, (ii) the exclusive control of both data sources and data analytics becomes a potential "bottleneck" and, (iii) consumers wishing to use dominant platforms face excessive/exploitative demands for their data in return. A 2015 speech by the EU Data Protection Supervisor at the joint ERA-EDPS seminar explores in some detail the interaction between EU competition law enforcement and protection of EU citizen's personal data. The EDPS concludes that 'antitrust regulators need to work with others to reach a common understanding of how to embrace the social benefits of powerful data crunching while avoiding harm to the individual and respecting the fundamental rights to privacy and to data protection'.

These digital markets characteristics do challenge existing policies and call for reviewing the competition framework to ensure that an efficient competition policy is applied that fits the dynamics and market realities of the digital ecosystem. Therefore, a holistic approach is needed that explicitly accounts for all relevant economic features and their competitive interactions, which are likely to reinforce the potentially anticompetitive standalone effects. Moreover, any framework revision should ensure to implement a level playing field between the telecommunications companies and other market operators that provide substitute services.

In addition to the above, we recommend BEREC to monitor, and once it is published, analyse the upcoming DG Competition report on shaping competition policy in the era of digitisation to which GSMA submitted a response.



#### 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



We believe that, faced with the challenges described above, current competition and regulatory approaches may not be suitable for the unique characteristics of data driven businesses. The EECC does not even address data-related issues. Enforcement tools may need to be sharpened and certainly existing lesser-used tools (e.g. market studies, market investigations and sector inquiries) will need more regular airing to ensure that enforcers keep abreast of changes and industry participants from hitherto un or under-regulated sectors view the vigilance of enforcers as a reality rather than an exceptional occurrence.

The way in which we analyse and assess these types of business models needs to be adapted to ensure we can meet a wide set of policy objectives. Any policy regime must ensure that the data value chain continues to thrive as a major driver of economic growth and social progress.

In order to allow all industries and all types of market players the opportunity to invest and contribute fully to the development of data-driven economy and to allow the whole data ecosystem to sustain and foster economic growth, incentives to private investment is of primary importance.

Any regulation of the digital economy should also establish a consistent framework for all companies that collect and use personal information. In a connected world where individuals use multiple devices and services from different providers, the most effective way to protect consumers is through one set of rules which apply to the processing of personal data. Privacy regulations that apply to only one set of technologies or industry players create customer confusion and distort competition.

The GDPR represents significant progress in establishing generally applicable regulatory frameworks that are consistent and technology neutral. The proposed ePrivacy Regulation is also generally consistent with this goal; however, it represents a more restrictive approach.

This fact is most obvious with regards to the current negotiations on the ePrivacy Regulation, which should strive to ensure a genuine and effective level playing field supportive of greater competition in the data-driven markets. These negotiations could otherwise lead to a strengthening of existing dominant operators or could facilitate the extension of existing market power to new data-driven markets and data sources. More precisely, the ePrivacy Regulation needs to incorporate the same tools as the GDPR, such as pseudonymisation of metadata, to enable data analytics to take place under fair and consistent rules across all sectors and create a coherent legal framework with GDPR.

As regards competition issues relating to questions on access to data, data sharing, interoperability, etc. we do not see any evidence (especially in IoT and M2M markets) that supports the existence of structural and persistent market failure which would warrant ex ante regulation to step in. Instead, we consider that contract law provides all necessary tools, as it presents a flexible and decentralized approach that is fit for purpose especially in light of the complex, still emerging, and dynamic market environment. Hence, any attempts to legally force access to private data, even in the case of public bodies requesting data that they have classified as being of public interest, would be misleading and detrimental. They would discourage market entry, investments, and innovations and thereby jeopardize the development of a future-proof and flourishing European Data Economy.



If, however, market failure is observed, we consider a more flexible and swift policy approach as being best suited to restore competition; this is particularly true if it is applied on a case by case basis and if it is designed such to promptly respond to the dynamics and market realities of data-driven markets. For instance, assume that private data of public interest are subject to under-provision due to, e.g., antitrust issues or coordination failures. In such a case, obligatory access might – inter alia - be a conceivable remedy. However, a case-by-case approach needs to be followed where obligatory access shall be assessed among all other feasible remedies. Only if it proves being the most effective and least invasive remedy, obligatory access should be used to restore the functioning of markets.

Please see also our response to 4.1

# 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

Different services require different performance characteristics to enable the data economy, so all mentioned parameters are highly relevant. The parameters covered should reflect the



Commission's definition of very high capacity (VCH) networks. VHC ECS network will play a very important role in supporting the further expansion of digitisation and of the data economy. This competitive expansion needs investments, and a regulatory framework which supports long-term investments in the latest network technologies, such as 5G for wireless networks. In order for operators to engage in such long-term investments, the regulatory framework should then provide sufficient visibility and long-term stability, and be oriented towards promoting private investment in the networks and services allowing the advent of a fully digitalised economy. As such, investment in VHC networks is a key parameter to keep in mind when devising the regulatory framework for ECS. Alongside investments, the key parameters should relate directly to the consumer experience - as experienced and understood by consumers. Latency, for example, means nothing to the majority of consumers – consumers care about how long they have to wait until they get a response from the person they are calling. We note that most consumer problems and anxieties nowadays come from the interaction with apps and platforms – and not from ECS providers per se. As such, it is not clear what NRAs can do given the narrow scope of their remit, still grounded in the old telecommunications value chain and in the EECC.

However, we would encourage BEREC to actively engage with how it can assist in shaping data usage methods across the value chain given the inclusion of number independent interpersonal communications services in the EECC, which extends the remit of NRAs beyond traditional telecoms. We believe this could be achieved by enhanced cooperation and regulatory dialogue with other regulators who have a remit in this area (primarily data protection and competition authorities).

#### **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**

To enhance the development of the data economy, ECS providers should be subject to an enabling regulatory environment that provides the flexibility needed to accommodate future innovation. This regulatory environment should also ensure a level-playing field with other providers offering similar services and/or processing similar data. For example, platforms and traditional telcos processing location data, irrespective of the underlying technology, should be subject to the same regulation (also see our response to question 2.3.).

ECS providers can develop their services to meet the specific needs they are able to identify for different users. The problem of the development of the 'data economy' is not only one of bottlenecks that can be remedied by public authorities, but equally one of business development in general. ECS providers need flexible rules that are no more burdensome than objective necessary to avoid a negative impact on the innovation process.

Additionally, please see our response to 1.4.



#### **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:

Consumer demand for new data-driven services continues to grow, and companies seek to innovate and compete across the entire the value chain. Consequently, consumer personal data is increasingly used in a variety of contexts and by a variety of providers. To thrive in this new data economy and provide their full contribution to the wide development of the data economy, ECS providers should be subject to a regulatory level-playing field that is technology and sector-neutral. For example, in the context of data protection regulation, the GDPR in its article 5.1 (b) and recital 50 provides more flexibility for processing location data, e.g., under the legal basis of legitimate interest and the principle of "compatible further processing, (with a.o. pseudonymisation as an enabling safeguard)"<sup>4</sup>, than the proposed ePrivacy Regulation ('ePR') provides. Under the ePR, certain location analyses could still be made by app providers working with GPS location data while the same analyses will not be possible for telecom operators using network generated location data and this notwithstanding the fact that in-app GPS location data is much more accurate than network generated location data.

This is a striking example of how failure to create a genuine and effective level playing field can impair greater competition in data-driven markets with large technology companies results in the strengthening of existing dominant operators and/or in facilitating the extension of existing market power to new data-driven markets and data sources.

While encryption enhances security, this practice potentially reinforces platform effects and to turn a situation where networking performance data was accessible by intermediaries in electronic communication networks to a situation where such data can only be accessed through platform players, potentially for a fee.

With respect to IoT, as BEREC noted (page 11) in the report "Enabling the IoT<sup>5</sup>", services are still very much at an initial stage of evolution and "generally depend on connectivity service as an input product, but connectivity accounts for a relatively low proportion of the overall revenue opportunity in the IoT value chain".

IoT services can connect through a variety of competing networks: fixed, mobile, satellite, licensed or unlicensed Low power Wide Area (LPWA), short range (Bluetooth, Zigbee). The ultimate connectivity solution choice will depend on a number of factors, such the service provider's needs, the scale and geographical footprint, the type of application, the device lifetime and bandwidth requirements.

To maximise the opportunity of IoT and promote new revenue models based on the data economy BEREC should recognize the relatively nascent state of this industry, ensure equal

<sup>4</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&from=EN

<sup>&</sup>lt;sup>5</sup> https://www.gsma.com/iot/wp-content/uploads/2014/02/M2M-report\_GSMAi.pdf



treatment of all ECS providers offering IoT connectivity, ensure the principle of technology neutrality, and rely on competition.

Demand for data is self-sustaining: the exponential rise in network capacity demand evidences the dynamics of demand and usage of data rich applications and services, which requires further investment to upgrade networks in order to meet the increasing demand. Moreover, the full contribution of ECS to the benefits induced by the data-driven economy implies that they can extract the full value from their data, in compliance with the rules. This full contribution relates to the need for a level-playing field in the data-driven economy. Finally, policy makers should recognise the central, enabling role that ECS play in the data-driven economy, at the level of connectivity, (networks) and also at the level of digital services. This role will be even more crucial in the 5G economy.

# 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 operators<sup>6</sup>. 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

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<sup>&</sup>lt;sup>6</sup> For example, the analysis of topography data for planning network deployment can help increase the range and transmission capacity of mobile radio base stations.



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

See our answer to question 2.3 for our view on how telcos are affected by existing rules on the use of data, which limits their potential to maximise societal benefits from the data they collect.

On the importance for data for the economy in general, please also see the aforementioned Data Value Chain study, and in particular page 42 to 46 for an overview of the role of mobile operators and their interaction with the data economy. Telecom operators are provider of connectivity and digital services (also data-driven services), and their activities are, as a result, located at different key points of the whole data value chain, which makes them primary players of the data economy & of the data industry.

Operators are seeking ways to make more productive and societally beneficial use of data, for example using **aggregated location information** to help us and third-party partners to understand movement patterns of populations through time and space. Such information can serve to improve public transportation, congestion, urban planning and smart cities, but also contribute to energy production efficiencies and more targeted public health policies. For most of these types of applications pseudonymised data is necessary, meaning that operators continue to uphold the highest privacy standards, whilst making the best use of data to increase societal value.

The remuneration of data has become a substitute to the remuneration of money in the digital market for services. This particularly refers to number-independent ICS, which become subject to sector-specific regulation in the EECC. A reasonable translation of end-user



protection to data-based business models is required, to avoid that end-user protection is applied in a non-discriminatory way and avoid providing incentives for undertakings to rather rely on the monetisation of data instead of charging a price.

#### **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

As a trade association we do not systematically collect or store data and information about our members' commercial strategies, including how they make use, if any, of (anonymised) data.

However, we can add that ECS providers are innovating with data in numerous ways. For example, in the Smart City context, GSMA members offer solutions that help municipal authorities to manage water infrastructure efficiently. Through the use of advanced, LTE-enabled acoustical sounding technology, a city water district can permanently monitor for leaks on the oldest and most heavily used water lines. This allows the water district to continuously monitor for and repair small leaks, before they become the big leaks that lead to catastrophic failure.

Similarly, Remote Patient Monitoring Systems use a secure, cloud-based platform to connect medical, wireless-enabled peripherals (e.g., temperature, pulse and blood pressure monitors, weight scales and, in the near future, glucose monitors) with mobile devices in a patient's home and with caregivers' monitoring systems. Participants receive automated coaching and reminders; they can conduct video conferences with healthcare staff through an intuitive user interface. This technology empowers patients with chronic illnesses to adhere to their care plan with easy-to-use monitoring devices and simple-to-follow care plans. It is highly secure and takes place from the comfort of the patient's home.

#### **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 providers<sup>7</sup>.

#### Answer to question 3.3

The mobile industry is harnessing big data to help public agencies and NGOs tackle infectious diseases, disasters, environmental impacts and climate change. In a humanitarian crisis, timely information is crucial. To respond effectively and efficiently to the spread of infectious diseases, pollution, earthquakes and other disasters, governments and NGOs need to know where the impacted people are, in which direction they are moving and how the environment is changing. Mobile operators can provide that information, while respecting individuals' privacy and safeguarding personal data. Through the GSMA, mobile operators have

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<sup>&</sup>lt;sup>7</sup> As defined in the EECC, including providers of OTT-0 or OTT-1 services.



established a common framework to analysing aggregated and anonymised data captured by telecoms networks to derive insights to help people recover from a disaster contain epidemics and contend with environmental impact. Together with an Advisory Panel of UN agencies and partners, the operators are developing relevant and sustainable approaches/models for Big Data for Social Good, to accelerate its impact on the UN's Social Development Goals.

The scope of the projects has increased from aiming to support the assessment of air pollution<sup>8</sup>, to new applications including tackling key health epidemics such as Tuberculosis<sup>9</sup> and multi-drug resistant Malaria, alongside an extension into disaster preparedness and climate impact.

In addition to expansion of the scope and scale of the programme, proactive collaboration between the operator taskforce and advisory panel members has empowered key learnings around the significant opportunity of combining mobile big data with contextual data sets (weather, population etc.) to derive key insights which could enable demand side agencies and governments with a model to deliver solutions for the benefits of their citizens.

#### 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 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

Firstly, the GSMA Data Value Chain study demonstrates that the current companies dominating the data economy are those that combine low cost (or zero cost) access to personal data, are not prevented from using it, including sharing it with third parties, and can combine it with analytical capabilities that can turn the data into insights on consumer behaviour – and sell it to advertisers. Most of those companies are multi-sided digital intermediary platforms, whose business model is grounded on the productive use of personal data, being gathered from consumers on one side of the market (usually offering zero-monetary priced services), and monetised on the business-to-business side, notably through the selling of advertising space. Due to mostly indirect network effects and scale effects inherent to such type of industrial organisation, data-driven economies tend to produce highly concentrated market structures, which are compatible with the maximisation of efficiency and

<sup>&</sup>lt;sup>8</sup> Telefónica Brazil (Vivo) is working with the municipalities of São Paulo to harness anonymised mobile network data to help combat the adverse health impact of air pollution. See case study at: https://www.gsma.com/betterfuture/wp-content/uploads/2018/05/BDSG\_TelefonicaBrazil\_v9.pdf

<sup>&</sup>lt;sup>9</sup> Bharti Airtel (Airtel) and Be He@Ithy, Be Mobile (a joint initiative between WHO and the International Telecommunications Union), together with the GSMA, developed a proof of concept (PoC) in the Indian states of Uttar Pradesh and Gujarat, which uses anonymised mobile network data to help pinpoint geographical locations at risk of increasing TB incidence. See case study at: https://www.gsma.com/betterfuture/wp-

content/uploads/2018/09/Helping\_end\_Tuberculosis\_in\_India\_by\_2025.pdf



welfare. However, monopoly power can extend to other markets through leveraging, a practice that can potentially have foreclosing effects, or through the systematic acquisitions of smaller innovators, which may have the effect of concentrating all available innovations on a specific field, and potentially stifle competition. Same of those companies already provide ECS services (like Whatsapp and Messenger) and can, and do, collect and use personal data routinely. So we urge BEREC to focus on the issues and potential competitive concerns that may arise from these powerful combinations of assets and consumer services – and from the leveraging of market power from markets for data-driven product and services to other markets in the digital ecosystem.

Therefore, we do think that data should be included in competition assessments for those that have *at their commercial disposal* vast datasets of different types of data – location, personal data, buying behaviour, etc. – which may confer them an unassailable advantage which could limit the ability of rivals to compete effectively/result in anticompetitive foreclosure. This issue is well discussed in the 2016 CEG report for the GSMA on *Resetting Competition Frameworks*<sup>10</sup>. The study urges authorities to assess the extent to which big data confers market power. Large-scale data gathering and analysis have become important features of digital markets, with the potential to influence anticompetitive effects. Data per se need not be a competition concern. The impact of big data on market power depends on the product or service in question and should be assessed on a case-by-case basis. The key issues are whether the data is economically and technically replicable, and the significance of data to competitive performance.

Traditional ECS providers do not exercise any market power on the raw data related to their infrastructure because more precise and accurate data sets are available in the digital market (ex. Google, Uber <a href="https://movement.uber.com/?lang=fr-FR">https://movement.uber.com/?lang=fr-FR</a>). On the one side, data available for telcos are less precise and accurate, therefore don't give an advantage over non ECS providers; on the other telcos are refrained from using data available to them due to regulatory constraints. Data sets of very different origin may be substitutes to provide insights into a given issue. We do therefore not see any change in competition dynamics within the telecommunications sector itself (vis-à-vis e.g. MVNOs).

Additionally, BEREC needs to consider that particularly number-independent ICS often base their business model rather on the monetisation of data than on charging a price. Since many end-user rights are focused on and limited to services provided against monetary remuneration, those business models based on money as remuneration face less burdens related to end-user rights. Also, this may lead to incentives for business to rather remunerate data instead of charging money – at least where those business do not face regulatory restraints in this regard.

The access to data should be analysed in a broader scope than the ECS framework and raises particular questions related to the market power of global digital platform companies that are not related to SMP in the context of ECS. We believe the questioning here is a far too restricted way of looking into the effects of data economy.

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<sup>10 &</sup>lt;u>https://www.gsma.com/publicpolicy/resetting-competition-policy-frameworks-for-the-digital-ecosystem</u>



In sum, we believe more intensive use of data does not have a significant competitive impact in the provision of ECS services, because data is not at the core of the business model and in any case there are better data sources outside the ECS market that can be used as a substitute to the data that ECS providers can gather in the provision of their services.

See our response to 1.4 for additional perspectives.

#### 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

See our response to the previous question. The focus should be on those companies that can collect, use and combine different sources of data, including personal data, and offer services. We see therefore big differences – in terms of market power and the ability to leverage such power in new markets – between traditional ECS providers and platforms providing communications services and functionalities.

#### **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**

The GSMA and its members envision an enabling regulatory environment that supports individuals' fundamental rights, while permitting technological developments and spurring investment. To manifest this reality, the GSMA urges policymakers to consider the impact of the ePrivacy Regulation (ePR) on both existing and future products and services that are critical to Europe's digital growth, including the Internet of Things (IoT) and 5G.

The GSMA and its members recognise the importance of the confidentiality of communications. However, when it comes to the processing of communications metadata, including location data, we believe that the ePR's corresponding rules are overly restrictive. In contrast, the risk-based approach of the General Data Protection Regulation (GDPR) enables the processing of personal data based on a number of legal grounds. Data processing guided by robust privacy principles and underpinned by privacy by design, data protection impact



assessments, and technical safeguards such as pseudonymisation and encryption will enable innovation while protecting consumer privacy and should be recognised in the ePrivacy Regulation.

# 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 improve significantly 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) Directive<sup>11</sup>, 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.

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<sup>&</sup>lt;sup>11</sup> 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 perform better 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**

We do not have any specific view or examples of best practice on this, other than to note that: i) any tool that supports better regulation (i.e. more efficient and less costly), monitoring compliance with existing regulatory obligations, and deregulation should be considered, including the use of digital analytical tools where appropriate; ii) that any approach, new or old, should be grounded in proportionality with respect to the regulatory burden imposed on regulated operators, including on making data available to achieve regulatory objectives and; iii) NRAs should use data to update more regularly their market analysis and the need of remedies.

Irrespective of this recommendation, BEREC should motivate NRAs to further increase intelligence on data-based business models by OTT, based on the new option to request data from providers of number-independent ICS in the EECC. A better understanding of these business models is crucial to properly monitor ECS markets and apply adequate obligations where found to be necessary. Particularly, this is crucial with view to the upcoming review of the end-user rights chapter of the EECC.

NRAs can use the data collected under Article 22 of the EECC (i.e. "network mapping") and during the market analysis work specified in the SMP Guidelines to produce more refined and granular definitions of both product and geographic markets, which are very relevant for fixed broadband services.

#### 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**

The GSMA feels it is objectively difficult to answer this question without BEREC being more specific as to the regulatory objective that the collection of data in question would pursue. We would like to note however that before further data is considered for collection and publication by NRAs, there must be a proper assessment of: i) the level and usefulness of data already in the public domain, or readily available to the public; and ii) a proper impact of the benefits and costs of collecting and making available any new operational and commercial data from operators to NRAs for their internal elaborations, (iii) a proper assessment of impact for operators of making their commercial data public. In any event, the NRA should bear the cost of data collection.



BEREC is encouraged to consider the central principle of SMP market analysis as defined in the new SMP Guidelines: No data collection for any market analysis or regulation is needed unless it has been demonstrated that there are competition problems in the telecom retail markets. So far we have not seen any market player define an intra-telecom sector competition problem with access to data.

Please see also our response to 1.4.

#### **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**

Mobile coverage is a competitive issue and publishing future network deployment plans – as a highly sensitive information – should be treated with appropriate discretion, because deployments plans are constantly evolving depending on market evolutions and competition. Data collected on future mapping represents market intervention and public disclosure of it may lead to less investment, as operators will be reluctant to commit to investments that may be inefficient. Therefore, sharing of information with end-users in relation to NGN deployment should remain a voluntary act by providers and not fall within the competence of NRAs. Any publishing of information should in general not concern future deployments, but only focus on existing networks and already confirmed plans of networks deployments. Also, detailed data such as on consumer complaints and service usage is highly confidential. It is not apparent in how far the publication of such data is required in the scope of this exercise.

In addition, BEREC should consider the already established broad publication requirements on QoS in the Open Internet Regulation and the EECC. Data on coverage are often already available publicly on a voluntary basis, e.g. coverage maps.

In general, it is of utmost importance that before any data collection, its purpose, usage and access conditions are clearly defined and properly justified. The scope of the data to be collected is to be defined depending on the purpose, usage and access conditions, following the principle of proportionality. These conditions should be defined only after a public consultation.



#### 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 Regulation<sup>12</sup> 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**

As observed in our answer to question 4.2, it is not proven that there's a need for further data to be first collected from the industry and then made available to the public. We remind BEREC that: i) in the context of the regulatory framework for electronic communications, data collection and publication is a specific instrument to address perceived market failures, including in terms of transparency; and ii) that the spirit of the PSI Directive is to encourage "the re-use of public sector information"13, while the data listed in the question is private commercial and operational data which can be collected and published by NRAs only for specific regulatory objectives. Examples of public data in this context would be, for example, statistics on the budgets, employees, projects that the NRA itself generates. As data is a private asset of a company, there is no objective reason and justification to make it public, apart from ex post remedies. It would go against incentives of private firms to increase their digitisation and their usage of data. Except under voluntary initiatives, there should be no rationality of making private data publicly available, as such an obligation would curb the development of the data economy. Making private data public by a public body also goes against the merits of the PSI Directive, which foresees re-use of "public" sector information only. Data from public administration, which can be in the interest of the public, could, therefore, be made public if needed and if appropriate- for example results of public sector tenders and performance. Overall, property rights on data and data ownership at the level of private firms should not be

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<sup>&</sup>lt;sup>12</sup> 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)

<sup>&</sup>lt;sup>13</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0037



under any specific regimes (other than rules on data protection), and should be treated as private capital assets or products.

# 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), reuse 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 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

First of all, we note that it is not possible to examine the competitive conditions of "dataeconomy related markets" without being specific about the type of data, and hence the market, which we are referring to - conditions may differ depending on the type of data, and relative value chain, considered. However, from a general perspective, we note the findings of the GSMA Data Value Chain report, which, in relation to market power and network effects on the data economy, states that "Many data-driven businesses and platforms have strong direct and indirect network effects which are drivers of efficiency and beneficial for users. Vertical integration and closed business models have a place since they can facilitate the launch of new services where closer integration of device and platform are needed and standards have not yet emerged. However, in data-driven businesses the direct network effects can lead to especially strong market positions and indirect network effects can further strengthen positions and become in effect very high barriers to entry for any potential competitor. In fact, for some of the largest internet platform-based businesses, they already have so many users and hold so much data about these users, that even with massive investment it is difficult to imagine a new entrant being able to compete effectively in creating the necessary virtuous circle to attract users and advertisers."14 Also relevant here, in this context, is our response to question 2.3 and related, where we state our view that there's a lack of level playing field at present which is hampering greater competition in the data economy.

Finally, in relation to the data-sharing point and IoT, we note that industry-led initiatives are key to facilitating the definition of common standard approaches to data sharing. For example, in the context of IoT and Big Data the GSMA is promoting a number of initiatives aimed at helping members grow capabilities in this domain, this is done in full transparency with the entire ecosystem:

- A technical framework architecture blueprint for the delivery of Big Data & Al services and the support for sharing data in a controlled and secured way with partner organisations;
- Promotion of standards in the areas of APIs for generic data sharing across the IoT and related areas (such as weather forecast data). The GSMA has worked with FIWARE on the use of the NGSIv2 API as a generic API for the sharing of data for example in Smart City applications where there are multiple silos of data. This work has now been picked up within the scope of an ETSI Industry Standardisation Group ('Context Information Management') which is designing a successor to NGSIv2 called NGSI-LD;
- Development of a set of 'harmonised data models' which are designed to help developers, data publishers and data consumers to have a more unified approach to publishing and

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<sup>&</sup>lt;sup>14</sup> GSMA Data Value Chain study, page 56.



consuming data for 'common' types of data. In total there are now almost 50 data definitions covering areas such as environment (air quality, water quality, weather observation & forecasts), drones, roads and vehicles including public service fleets, agriculture, and smart buildings; and

- Documented approaches for applying machine learning to domain problems such as air quality forecasting and for segments such as agriculture.

Please see our response to 1.4.

### **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

From a general perspective, the different regulatory instruments and tools that can be applied to ECS providers are there for specific reasons - economic regulation, transparency, consumer protection, etc. - so unless there is an indication of the type of problem at hand, it is not possible to give a constructive answer as to how the existing regulatory instrument and tools might be applied to the data economy. In light of the unprecedented dynamics and scalability possibilities of data-driven businesses we do not consider regulatory bodies (neither sector-specific nor horizontal) to be well suited to address any competitive issues in the data economy. This is especially true for IoT and M2M markets which are characterized by emerging and growing businesses and do not offer any robust evidence of structural and persistent market failure that could be addressed by ex-ante regulation. Rather, we hold the view that contractual freedom and market-based negotiations are best suited to govern access and reuse of data, data sharing, interoperability, etc. In case of market failure, competition policy shall kick in and restore the competitive process by choosing the most accurate remedies which might entail obligations to grant access or to share data with competitors. Competition policy needs, however, to be reformed such that it can respond more swiftly, flexibly, and effectively to anticompetitive conduct in data-driven (platform) markets.

In addition, we note that the final version of the new EECC fails to provide the broad scope required to properly consider the interplay of data-driven businesses at large and ECS providers.

Please see our response to 1.4.

#### 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

The GSMA believes it is of paramount importance to facilitate the co-ordination and cooperation of the various sector regulators and policy makers shaping the European data economy strategy and policy framework.

The cross-sector, cross-industry nature and the transformative impact of the data economy, Big Data and IoT means that policymakers are increasingly called on to share experience and expertise, and to work in close co-operation, particularly at policy setting stage. Key sectors include automotive and smart transport, energy, utilities, and smart cities.

For example, a greater co-operation should lead to a wider acceptance across institutions of the principle of Technology Neutrality. In Automotive and smart transport, the GSMA is engaged to promote the implementation of a technology neutral framework for Cellular – Vehicle to Everything (C-V2X). However the current version of the Delegated Act on Cooperative Intelligent Transport Systems (C-ITS) still endorses a Wi-Fi based communication (known as ITS-G5) as the baseline technology for connected cars in the EU, at the expense of mature and standardised alternatives such as C-V2X.

The same situation is apparent for Unmanned Aircraft Systems (UAS), which have the potential to deliver profound socio economic benefits in the EU, and where mobile networks could have a vital role to play in ensuring the safe and secure use of UAS. However, the draft European Commission "Delegated Regulation on unmanned aircraft intended for use in the 'open' category, and on third-country UAS operators" currently prevents these benefits from being realised, as the remote identification system that it is envisaged to connect certain types of UAS in the Open Category is based solely on the use of unlicensed spectrum in the 2.4 or 5GHz frequency band (Wi-Fi). This, by definition, will prevent the use of licensed mobile spectrum for connecting these types of UAS.

Besides these challenges and as elaborated above, many services in the digital market and particularly referring to number-independent ICS are based on the commercial exploitation of data. Since consumer protection law needs to be adjusted to also cover these business models, various stakeholders (e.g. consumer authorities and DPAs) need to align to ensure a consistent approach, e.g. on data protection and contract law.

To facilitate increased dialogue between regulators to discuss areas of mutual interest and potential sectoral overlap, the GSMA will convene discussions between different regulators at our Mobile World Congress Ministerial Programme in February 2019. For example, we plan to convene a roundtable to discuss areas of convergence between data protection regulation and telecommunications regulation, with the participation of BEREC. Such discussions will



help identify areas of collaboration and steps to navigate an increasingly complicated regulatory landscape.

## **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

First of all, we would like to highlight the need to consider not only data markets, i.e. markets where data is the primary good being produced and exchanged, but, more importantly, markets for data-driven businesses and services. For the latter, it is important to take into consideration not only traditional assets, but, crucially, data assets, as well as the impact of direct and indirect network effects on consumer lock-in, barriers to entry, and, ultimately, competition and innovation.

In relation to the geographic scope of markets, as per our response to question 5.1, it depends on the type of data being considered, which affects the competitive dynamics. While we often refer to global markets in policy dialogues and discussions, when considering markets for the purpose of competition assessments, a more precise approach is needed, as specific considerations apply (consumer preferences and switching, supply side substitution, etc.). Overall a case by case approach is required - consistent with existing competition law principles on market definition as a starting point. For example, the EC found in the review of the proposed Microsoft/LinkedIn merger that the product market in question was limited to professional social networks (PSNs) and that the scope was national, on account of language-specific substitutes in at least some of the main European markets.

Please see our response to 1.4. 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

NRAs should work within their given competence to ensure that ECS providers are subject to the same rules and have access to the same commercial opportunities as available to data-driven platforms and businesses. See our responses to 2.2 and 2.3 for our elaboration on this.

#### **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

No additional issue at this stage.



# 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**

No additional issue at this stage.