

Consultation: Open Communications – Enabling people to share data with innovative services

Open Data Institute response

10 November 2020

About the ODI

The Open Data Institute (ODI) is an independent, non-partisan, not-for-profit organisation founded by Sir Nigel Shadbolt and Sir Tim Berners-Lee in 2012.

The ODI wants data to work for everyone: for people, organisations and communities to use data to make better decisions and be protected from any harmful impacts. We work with companies and governments to build an open, trustworthy data ecosystem. Our work includes:

- **pilots and practice:** working as a critical friend with organisations in the public, private and third sectors, building capacity, supporting innovation and providing advice
- **research and development:** identifying good practices, building the evidence base and creating tools, products and guidance to support change
- **policy and advocacy:** supporting policymakers to create an environment that supports an open, trustworthy data ecosystem

We believe that:

- Sectors and societies must invest in and protect the data infrastructure they rely on. Open data is the foundation of this emerging vital infrastructure.
- Everyone must have the opportunity to understand how data can be and is being used. We need data literacy for all, data science skills, and experience using data to help solve problems.
- Data must inspire and fuel innovation. It can enable businesses, startups, governments, individuals and communities to create products and services, fuelling economic growth and productivity.
- Everyone must benefit fairly from data. Access to data and information promotes fair competition and informed markets, and empowers people as consumers, creators and citizens.
- People and organisations must use data ethically. The choices made about what data is collected and how it is used should not be unjust, discriminatory or deceptive.

- Everyone must be able to take part in making data work for us all. Organisations and communities should collaborate on how data is used and accessed to help solve their problems.

We have a mixed funding model and have received funding from multiple commercial organisations, philanthropic organisations, governments and intergovernmental organisations to carry out our work since 2012.

We are responding to this call for input on the basis of our experience in data portability initiatives like open banking and across similar initiatives in other sectors, including our foundational work with Ofcom on Open Communications.¹ The ODI was also a member of the Open Banking Working Group that helped develop [the standards and guidelines for open banking](#)² and we continue to [monitor and promote this initiative today](#).³ We have also been involved in sector initiatives with Ofgem and Ofwat. Open Energy is opening up data in the UK energy sector to help create a fairer and more competitive energy market.⁴ Ofwat is focusing on how data sharing can drive innovation in the water sector.⁵

The ODI has responded to the FCA's consultation on open finance⁶ and will echo many of the same considerations regarding data infrastructure and data ethics here. The ODI has also joined the Open Finance Working Group alongside Finance Innovation Lab and StepChange to develop a third sector-led vision for how open finance could serve the needs of individuals, communities and wider society.⁷ The ODI is also a member of the Open Energy User Needs Advisory Group led by Icebreaker One⁸, and the Smart Data Working Group led by BEIS.⁹

¹ Open Data Institute (2020), "Open communications: an open trustworthy data ecosystem for the telecommunications sector [report]", <https://theodi.org/article/open-communications-an-open-trustworthy-data-ecosystem-for-the-telecommunications-sector-report/?fd>

² Open Data Institute (2016), "Open banking: setting a standard and enabling innovation", <https://theodi.org/project/open-banking-setting-a-standard-and-enabling-innovation/>

³ Open Data Institute & Fingleton Associates (2019), "Open Banking: Preparing for Lift Off", <https://www.openbanking.org.uk/wp-content/uploads/open-banking-report-150719.pdf>

⁴ Open Data Institute, "R&D: Open standards for the UK energy sector", <https://theodi.org/project/open-standards-for-the-uk-energy-sector/#1558340061441-cb8100c5-47f3>

⁵ Ofwat (2017), "Driving innovation in water", <https://www.ofwat.gov.uk/wp-content/uploads/2017/12/Driving-innovation-in-water-FINAL.pdf>

⁶ Open Data Institute (2020), "The Financial Conduct Authority's call for input on open finance: ODI response", <https://theodi.org/article/the-financial-conduct-authoritys-call-for-input-on-open-finance-odi-response/>

⁷ Finance Innovation Lab (2020), "Transforming data", <https://financeinnovationlab.org/our-work/transforming-data/>

⁸ Icebreaker One (2020), "Open Energy: Our plans and a call to action", <https://icebreakerone.org/2020/09/14/open-energy-our-plans-and-a-call-to-action/>

⁹ Department for Business, Energy and Industrial Strategy (2020), "Smart data working group", <https://www.gov.uk/government/groups/smart-data-working-group>

Consultation response

This is the ODI's response to the call [Consultation: Open Communications – Enabling people to share data with innovative services](#).

Consultation questions

Question 1: Do you agree with our assessment of the challenges that people and SMEs face when engaging with the market, which Open Communications might help to address? Please explain and provide evidence [Section 3]

N/A

Question 2: Is there additional evidence of problems that people and SMEs face when engaging with the market that you would expect Open Communications to help address? Please explain and provide evidence. [Section 3]

2.1 As we describe in [one scenario](#)¹⁰ in our report on Open APIs in Telecoms, there's no shortage of comparison websites and finding a new mobile phone contract or broadband provider is easier than ever. But today's comparison sites are typically geared towards price, helping people find the cheapest deal. If a comparison service had access to richer information about its users such as the places where people struggle with signal strength, their preference for strong ethics, or their real data usage rather than a single monthly number. Data like this could enable the creation of services for managing and switching between mobile network providers: ones that optimise based on privacy or signal strength. Of course, given the sensitivity of more detailed data about consumers to give more personalised recommendations, it's also critical that services like this have clear and trusted mechanisms for people to control what data is used for what purpose.

2.2 In our [second scenario](#)¹¹ we look at how when people live together in shared houses they might take on shared responsibility for paying and managing the bills. In many households, people come and go periodically. Most utility companies do not optimise for this complexity, instead defaulting to a single, individual account holder and shifting the administrative burden onto them. When things go wrong, companies will only speak to a single account holder. People joining or leaving a household also involves additional overheads on the account. If it was simple to deal with companies as a group, while also allowing individuals to retain control

¹⁰ Projects by IF (2018), "Choosing a new mobile network", <https://openapis.projectsbyif.com/scenario-1-choosing-the-best-mobile-network-operator/>

¹¹ Projects by IF (2018), "Managing utility bills in a shared household", <https://openapis.projectsbyif.com/scenario-2-managing-utility-bills-in-a-shared-household/>

over the data held about them and if utilities and, where appropriate, historical usage, could be 'handed over' to the next occupier, this could provide a lot of benefit to the consumer.

Question 3: Do you agree with our view of the benefits for people and businesses that Open Communications could generate? [Section 6]

3.1 We broadly agree with the benefits outlined in Section 6 of the consultation. In our report '[Open communications: an open trustworthy data ecosystem for the telecommunications sector](https://theodi.org/article/open-communications-an-open-trustworthy-data-ecosystem-for-the-telecommunications-sector-report/?fd)'¹² we provide additional similar benefits, such as comparing, switching, aggregating and managing communications products based on their needs and lifestyle, bill splitting in shared households, unbundling services across multiple providers for the best deal, and understanding usage patterns in public services. Of additional interest and concern in this consultation response are the headings 'People may benefit from innovation and the launch of new services' and 'Open Communications could enable services that benefit vulnerable customers'. We will elaborate more on this below.

3.2 There is very little discussion in the consultation document regarding location data held by communications providers on mobile phones and other devices such as eSIMs for 'connected cars', or about other connected devices such as those considered under the umbrella of 'Internet of Things'. Mobility data is important at the moment due to its collection and use during the pandemic and the insights it can provide about compliance with lockdown and social distancing. The collection, retention, access to and use of location data of users – both beneficial and potentially harmful – ought to be addressed.

3.3 In our project looking at the potential use cases of Open APIs in Telecoms, we explored a scenario in '[improving a city's air quality using bulk location data from mobile phones](https://openapis.projectsbyif.com/scenario-3-improving-a-citys-air-quality-using-bulk-location-data-from-mobile-phones/)'.¹³ We believe that allowing consumers to share anonymised data, such as mobility data or environmental data, may be beneficial to societal decision making if done with a transparent process of what the data is going to be used for, and with appropriate safeguards such as anonymisation. These safeguards should include but are not limited to: opting-in to specific data sharing, the commitment to data minimisation – TPPs only take the data they need based on clearly communicated use cases – and the easy ability to remove all historic data. The collection and sharing of "behavioural data" that could be used to re-identify an individual or target them with "personalised" services should be made transparent.

3.4 This approach could be extended to handling the non-personal data captured by smart technologies (such as Internet of Things (IoT) sensors, mobile applications or connected devices and vehicles).

¹² Open Data Institute (2020), "Open communications: an open trustworthy data ecosystem for the telecommunications sector [report]", <https://theodi.org/article/open-communications-an-open-trustworthy-data-ecosystem-for-the-telecommunications-sector-report/?fd>

¹³ Projects by IF (2018), "Improving a city's air quality using bulk location data from mobile phones", <https://openapis.projectsbyif.com/scenario-3-improving-a-citys-air-quality-using-bulk-location-data-from-mobile-phones/>

3.5 However, in our research on [open cities](#), we observed that cities often over-invest on sensor equipment to collect data either without a well justified purpose, or before properly considering that data they currently hold.¹⁴ Cities that want to become ‘smart’ should also embed core concepts of openness to enable the varied stakeholders within cities to make better decisions. We recommended that cities and other localities seeking to collect data from citizens also invest significant time in understanding how to better use the data they already hold and to work collaboratively with the data subjects the data was collected from. Any additional data should be driven by use-cases and use principles of data minimisation.

3.6 In our [2018 report on personal data in transport](#), we discussed how sharing journey data and other data to increase personalisation of and access to transport can improve our quality of life. But if personal data is used in ways that erode trust, it can create data wastelands (where data is not collected or used), limiting the potential for transport systems to benefit everyone.¹⁵ We believe that mobile location data can function similarly: it can be used in insights for public services to benefit the populace, but if used improperly its collection and use can also erode trust in the organisations providing those services.

3.4 In our report with the RSA, [‘About Data About Us’](#), we discovered that people do not like data about them – such as behavioural data – being collected and used to make automated decisions about them. When they were told that the outcome would benefit them, they felt suspicious about who had determined that benefit. However, people did express a willingness for data about them to be used to help make better societal decisions on the condition that they were not going to be re-identified and that they had the option to opt in. Transparency about what is being done with the data was a vital precondition.

3.7 In addition, data from mobile devices, especially when combined with transport data, can amplify these benefits. [Our work looking at what data is being used during the pandemic](#) has shown that mobility data – data describing the movements of groups from one location to another – has the potential to be beneficial for government authorities, transport planners and epidemiological researchers, as well as others, to potentially learn more about the effects of the pandemic and policy actions.¹⁶ We do not condone the use of an individual's data or data that could be used to re-identify individuals or specific societal groups. Striking the right balance here is critical. Furthermore, we would encourage data minimisation and collecting and retaining specific data for a specific purpose.

3.8 When the world isn't in the midst of a public health emergency, understanding how people move in the urban area can be helpful in looking at urbanisation issues, such as traffic management, urban planning, epidemic control, and communication network improvement. A

¹⁴ Open Data Institute (2020), “R&D: Open cities”, <https://theodi.org/project/open-cities/>

¹⁵ Open Data Institute (2018), “Personal data in transport: exploring a framework for the future (report)”, <https://theodi.org/article/personal-data-in-transport-exploring-a-framework-for-the-future-report/>

¹⁶ Open Data Institute (2020), “What mobility data has been collected and published during Covid-19?”, <https://theodi.org/article/what-mobility-data-has-been-collected-and-published-during-covid-19>

previous [ODI report on the use of personal data in transport](#) pointed to three potential benefits of sharing mobility data:¹⁷

- Increasing accessibility and personalisation for passengers
- Improving operational efficiency and innovation for organisations
- Tackling systemic transport issues for the benefit of everyone

3.9 Businesses can create value by using third-party data to develop new products and services. Our research has shown that they can unlock additional value by sharing data they have collected.¹⁸ Increasing access to data held in the private sector has proven benefits to businesses in many ways, including:

- [Improving supply chain efficiency](#)¹⁹
- [Increasing market reach](#)²⁰
- Facilitating [benchmarking and market insights](#)²¹
- [Building trust](#)²²
- Improving efficiencies through [open innovation](#)²³, including within [regulated markets](#)²⁴
- Collaborating to [address sector-wide challenges](#)²⁵

3.10 Our research with the Bennett Institute at the University of Cambridge on [the value of data](#) has shown that despite increasing access to data being an important way to unlock its wider economic and social benefits, there are various market failures around data and the data economy that mean data sharing initiatives will not necessarily emerge on their own.

3.11 There are some additional views on data portability benefits from our open finance response that we would like to transpose below.

3.12 Cross-sectoral use case: Ofcom should consider the use of Open Communications data outside the communications sector, and ensure that open finance is set up to enable those benefits to happen. The rising trend in ‘Smart Data’, as being explored by the Department for Business, Energy and Industrial Strategy (BEIS), is increasing the likelihood for cross-industry data sharing, and Open Communications should begin preparing for this eventuality in order to provide benefits to consumers and safeguard them from harm.

3.13 Climate action: Ofcom should take particular consideration into understanding how Open Communications can contribute to the UK government’s net zero ambitions. Organisations such as Icebreaker One and others are researching and building standards into the connections between finance and energy data to help drive better decision making by individuals and organisations. In our project looking at the potential use cases of Open APIs in Telecoms, we

¹⁷ Open Data Institute (2020), [‘Personal data in transport’](#)

¹⁸ Open Data Institute (2020), [‘Report: Sharing data to create value in the private sector’](#)

¹⁹ Open Data Institute (2020), [‘Case study: The value of sharing data in supply chain optimisation’](#)

²⁰ Open Data Institute (2020), [‘Case study: The value of sharing data for improving market reach’](#)

²¹ Open Data Institute (2020), [‘Case study: The value of sharing data for benchmarking and insights’](#)

²² Open Data Institute (2020), [‘Case study: The value of sharing data to build trust’](#)

²³ Open Data Institute (2020), [‘Case study: The value of sharing data to drive open innovation’](#)

²⁴ Open Data Institute (2020), [‘Case study: The value of sharing data in regulated environments’](#)

²⁵ Open Data Institute (2020), [‘Case study: The value of sharing data to address sector challenges’](#)

explored a scenario in [‘improving a city’s air quality using bulk location data from mobile phones’](#). Ofcom should explore this use case and others that have a direct positive impact on the climate.

3.14 Automated switching: ‘Automated switching’ was a promoted use case in open banking, and its lack of actual uptake harmed trust in that data portability initiative. To address this, we recommend listening to end users, data users and others about what the most useful use cases would be.

Question 4: Do you agree with our assessment of how Open Communications could enable services that benefit people in vulnerable circumstances? Are there other ways it could benefit people in vulnerable circumstances? [Section 6]

4.1 We broadly agree with the assessment that Open Communications could enable services that would help customers who may be defined as vulnerable address challenges as put forward in the consultation: engaging with a debt management service or charity; managing payments better when combined with open banking data; finding better deals; and managing multiple accounts better.

4.2 We believe there could be additional benefits with more types of data being made available in a secure and privacy-preserving way. Mobile location data could help customers who may be defined as being in a vulnerable situation find local services better.

4.3 Data pooling within communities could allow for groups to manage accounts more efficiently by having those with excess free minutes / mobile data plan capacity be able to donate that capacity or sell them more cheaply to other customers who could benefit from such a service.

4.4 When combined with other utilities data, local authorities could pursue targeted interventions to provide services for customers who could potentially benefit. Ensuring that people are not being targeted against their wishes, or being identified when they may wish to be anonymous is important. Customers should understand how they have been identified for targeted interventions by organisations, with organisations describing clearly and transparently the data and information used in identification. Such an approach would develop and encourage trust.

4.5 Customers who may be in situations or circumstances that make them vulnerable are often most adversely affected by the same negative industrial externalities that contribute to climate change. Use cases that could contribute to climate action in vulnerable areas would have an even greater impact.

4.6 However this comes with even greater risks given the financially precarious nature of the people in question. Risks increase due to both the exploitability of consumers, and the relative impact of negative outcomes.

Question 5: Are there any risks that we have not identified that could reduce the overall benefits of Open Communications? Please provide evidence, where possible. [Section 6]

5.1 As we discussed in the questions about benefits, there are always risks with increasing access to personal data. In the telecommunications sector this can become even more difficult due to the very transactional nature of the sector. The ODI believes that having rights over data is more meaningful and is more implementable than the concept of ownership of data.²⁶ In the case of communication between two parties this could mean that both parties might have potentially competing rights over data about their communication. This has particular implications for the telecoms sector.

5.2 We believe that allowing communications consumers to share data about their location, for example, could help address societal decision making and, if clearly explained, could be popular with consumers who wish to help improve their neighbourhood or the wider world. [As we have learned from user research](#)²⁷, people are in general enthusiastic about this if it is clear that the data will not re-identify them, if they have the choice to opt in and opt out at any time, to delete data about them that may be held, and if the benefits are clearly described.

5.3 In our report '[Open communications: an open trustworthy data ecosystem for the telecommunications sector](#)' we discuss risks for consumers and service providers.²⁸ Of prominent importance for consumers, and especially consumers who may be defined as vulnerable in certain circumstances, is the misuse of data after being shared.

5.4 There is a risk that increasing access to data could cause harm to customers who are already in vulnerable circumstances. This could occur by targeting financially insecure customers for predatory services akin to payday loans in the finance sector, forcing negative lifestyle changes to obtain services, or using algorithms trained on data that have in-built biases against different vulnerable groups in society.

5.5 In general, we believe that Ofcom should use the principles of data minimisation and use case driven rationale for increasing access to data. This allows for transparency of use when people are given the opportunity to share data about them, and they only need to share the minimum required. However often in innovation, it is difficult to understand what the best use cases might be from a dataset without experimenting first. In cases of non-sensitive data, data could be published openly so researchers and innovators can access it easily. In cases of sensitive data there should be measures put in place to mitigate harm to data subjects. This could be through a variety of anonymisation techniques, including synthetic data, coupled with technologies such as sandboxes in order to test a variety of potential use cases of data while reducing the risk of data exposure. This also allows entrepreneurs seeking valuable IP and first mover advantages to generate those without hoarding data.

²⁶ Open Data Institute (2018), '[No one owns data: we need to strengthen our rights](#)'

²⁷ Open Data Institute (2019), '[Data About Us: 'the people' know and care more than they are given credit for](#)'

²⁸ Open Data Institute (2020), '[Open communications: an open trustworthy data ecosystem for the telecommunications sector \[report\]](#)'

5.6 In our response to the open finance consultation with the FCA we identified the following additional risks that are also relevant here:

- Identifying protected characteristics is important to ensure that exclusion does not happen. [Our research on the protected characteristics of people using digital public services](#) has shown that digital public services are often not adhering to the equalities law and are not collecting protected characteristics to know who is being excluded and/or discriminated against and why.²⁹ To ensure exclusion in Open Communications is not a problem we would recommend the option for a customer to provide anonymous protected characteristics is built into services.
- Ofcom could assist in educating consumers to make informed choices about whether they wish to opt in or opt out of data sharing by enforcing rules for data users to be transparent and straightforward in explaining what data is being requested, for what purpose, for how long and what options the consumer has to change their mind at any time without a reduction in service. Ofcom could do this by supporting consumer data literacy initiatives and ensuring that data literacy forms part of digital skills frameworks. Ofcom could also support digital inclusion, including by building on research, guidance and existing policy such as the UK government's Digital Skills and Inclusion Policy.
- Engagement by Ofcom with consumers on how best to communicate choice would be a valuable move. Furthermore, engaging consumers to understand and consider that they may be sharing data about others would be a positive and important step for improving literacy around consent.
- Where out of date, incorrect or incomplete data being shared could result in incorrect advice or recommendations, a switch to an inferior product or the wrong price, is a concern about personal data, the right to rectification is a right under GDPR and should be secured if not extended in a post-Brexit data protection environment. Customers could potentially be reminded of this so as to better inform them on their rights and recourse options. It would also be important to review the recourse process for incorrect or incomplete non-personal data, such as data about products.
- Any requirement for additional data from users would need to be justified as necessary and proportionate and not just a data collection opportunity. Communications data is a strong indicator of people's behaviour as individuals and in relation to others. Combining communications data with other information, such as social-media activity, browsing history, health data, energy use etc will establish a deep insight and will develop a picture of that person and their relationships with others. While this may be seen as of immense value to industry, there is also concern from the public about this level of use of behavioural data. Using Open Communications should benefit the customer and not just the service provider. We recommend Open Communications products and services are transparent and honest with Open Communications users about the use of any

²⁹ Open Data Institute (2020), [‘Monitoring Equality in Digital Public Services \(report\)’](#)

personal data about them. They should also provide clear opt in options whenever possible which enable choice about what data will be used and why.

- Data sharing via Open Communications that powers AI and automated decision services could reflect the biases of the data used for training and provide harmful outcomes to groups. Our [About Data About Us report](#), produced with the RSA and Luminate, revealed that some people do not feel comfortable with the use of automated decision making.³⁰ In general, people want automated processes to be signposted clearly with explanation as to why and who has determined the benefit. They would prefer to opt in, not to have to opt out. Some people understand that personalisation of services mostly comes from data about them being analysed; they don't oppose that but they made clear they want to choose when that happens rather than it happening automatically or without their specific approval.

5.7 In order to minimise these risks and reduce harm to communications consumers, Ofcom should be very diligent in embedding data ethics as an ongoing check and balance. Data ethics relates to good practice around how data is collected, used and shared. It is especially relevant when data activities have the potential to impact people and society, directly or indirectly. We would suggest that the [ODI's Data Ethics Canvas](#)³¹ could be used to assist with posing necessary questions in the development of that framework. We would add that a clear framework of consent should ensure that there is granularity of consent, rather than bundling consent into one option.

5.8 Other tools to help with responsible innovation such as [Consequence Scanning](#), originally developed by Doteveryone and now managed by the ODI, should be used both in the crafting of Open Communications policy and the development of products using Open Communications data.

Question 6: Do you agree with the core principles that we have identified for the design of Open Communications? [Section 7]

6.1 We broadly agree with the core principles for the design of Open Communications and have some additional comments:

1. ***Data should be open to all eligible third-party services.*** We believe support should be given to market entrants. Data portability initiatives may favour existing market leaders without investment into potential challengers. This investment can come in many forms such as hackathons, challenge series, partnerships and more.
2. ***Data should reflect what people need to navigate the market effectively.*** Use open, inclusive, and ongoing user research to ensure that the right use cases are being

³⁰ Open Data Institute (2019), "Data About Us: 'the people' know and care more than they are given credit for",

<https://theodi.org/article/data-about-us-the-people-know-and-care-more-than-they-are-given-credit-for/>

³¹ Open Data Institute (2019), "The Data Ethics Canvas", <https://theodi.org/article/data-ethics-canvas/>

focused on, that the process is trusted and understandable by users, and that as different data and use cases become available Open Communications can adapt to that.

3. ***Security should be at the forefront of the design.*** At the ODI we see open data, data portability, and secure access to aggregated data as fundamental parts of our data infrastructure. Standards provide confidence in identity, security and privacy models, and ensure there is a mechanism for certifying third parties before they can use Open Communications, which reduces risks for consumers.
4. ***Users should be in control of the data they share.*** 'Control over data' may be misleading in terms of exactly what control the consumer has. While the consumer may be given control over the decision they make about the next stage of use over the data they want to share or be accessed, the control will not solely lie with them going forward. Indeed the rights over access and how data can be used are shared with others – namely those collecting the data. This should be made clearer.
5. ***Open Communications services should follow inclusive design principles and should be accessible to all users.*** Working inclusively will lead to greater fairness in the ecosystem by including and amplifying organisations that do not already have a say in the design of standards, systems and products. We therefore recommend Ofcom uses an open but focused user research approach to collect the views, needs and desires of different types of customers, data users, and data providers. In particular, we would encourage engagement with consumer groups and consumer rights organisations at the start of any product development – through face-to-face focus groups or surveys – to question, listen and learn from them about their needs. We recommend openness and transparency in the design and the development process, so that stakeholders, the media, and the wider public are as informed as possible about the process, and that there are clear touchpoints where they can be involved.
6. ***Open Communications should safeguard competition.*** Everyone must benefit fairly from data. Access to data and information promotes fair competition and informed markets, and empowers people as consumers, creators and citizens. In the context of Open Communications, what consideration/action will need to be taken to ensure that participating firms using increased information will not offer services only to more profitable customers, leading to a potential outcome of pricing people out of the market? What consideration/action will need to be taken to prevent broad negative discrimination around service provision? For example, products that increase inequality in lower income and vulnerable customers who often also have other protected characteristics. This project could be an opportunity to link to other regulated markets and sectors with data portability initiatives. Interoperability between open banking, open finance, open energy, open communications (and potentially open water) could potentially increase opportunity for innovation in service to customers as well as boost competition across sectors.

Question 7: On what kinds of communications providers do you consider that any obligation to provide customer and product data should sit? [Section 7]

7.1 GDPR stipulates that all personal data about individuals is subject to consent and data portability. Based on this definition, Ofcom should mandate that all communications providers should eventually have to implement Open Communications rules and standards.

7.2 This could be done over multiple phases to ensure a smooth implementation, with larger communications providers and higher value datasets being prioritised. Much like the logic behind open banking, getting larger and more financially sustainable firms to adopt infrastructure first will ensure quicker returns to investment and a simpler rollout for smaller firms with less available funds for implementation.

7.3 Where applicable, Ofcom should help SMEs adopt Open Communications infrastructure to encourage equitable benefit realisation in markets.

Question 8: Do you agree with our initial views on how to approach key issues for the design and operation of Open Communications? Do you have comments to make on other implementation issues? [Section 7]

8.1 In our response to the [open finance consultation with the FCA](#),³² we highlighted areas where an open finance initiative could learn from open banking. We believe many of the lessons we highlighted there would be applicable to Open Communications.

8.2 There are often significant cultural, legal and technical barriers to being more open with data. The UK has benefited from strong regulation from the CMA to enforce adoption of open banking. This approach has accelerated the adoption of open banking.

8.3 Standards are beneficial and useful in creating and establishing best practices, understanding and trust. In our research, interviewees note the benefit of standards including open banking standards, technical API standards and user experience standards. Standards also provide confidence in identity, security and privacy models, and ensure there is a mechanism for certifying third parties before they can use the open APIs, which reduces risks for consumers. However, they might not translate exactly into Open Communications: we would recommend further review to test their use and to ensure they would be of value and benefit to Open Communications.

8.4 The [Open Banking Directory](#)³³, which allows third-party providers (TPPs) to locate and connect to banks also enrolled in open banking, is useful. We would recommend that information about who implements Open Communications standards, and the quality of that implementation, is published as open data.

³² Open Data Institute (2020), '[The Financial Conduct Authority's call for input on open finance: ODI response](#)'

³³ Open Banking (2020), '[Open Banking Directory](#)'

8.5 The Open Communications ecosystem as a whole will need to create value for the individuals and organisations operating within it. An open innovation approach can help identify what stakeholders need. Ofcom and other partners should seek views from a wide range of potential end users to learn what they want, what they need, and what they fear or see as risky. This would help data providers and reusers develop products and services which are meaningful and valuable to users.

8.6 The initial open banking rollout focused on use cases that were not aligned to real-customer requirements. Working inclusively will also lead to greater fairness in the ecosystem by including and amplifying organisations that do not already have a say in the design of standards, systems and products. We therefore recommend Ofcom uses an open but focused user research approach to collect the views, needs and desires of different types of customers, data users, and data providers. In particular, we would encourage engagement with consumer groups and consumer rights organisations at the start of any product development – through face-to-face focus groups or surveys – to listen and learn from them about their needs.

8.7 We recommend openness and transparency in the design and the development process, so that stakeholders, the media, and the wider public are as informed as possible about the process, and that there are clear touchpoints where they can be involved.

8.8 We believe initiatives to encourage and support the creation of applications that use data – such as the Open Up Challenge³⁴ run by Nesta – are valuable in helping ensure the use cases being proposed and prototyped are feasible, desirable by customers, commercially beneficial to service providers, and understood better in the wider ecosystem.

8.9 A final lesson from open banking is that many organisations (including the CMA and Open Banking Limited, as well as the banks themselves) are confusing ‘open’ and ‘free’. In our corporate partnerships, such as with Arup³⁵, we have found it is useful to set up training and build capability around the facts and implications of open licensing, to help them feel more comfortable about adopting it.

8.10 In our response to the open finance consultation with the FCA we also recommended a sequence in which open finance could be developed based on our joint report with C Minds, ‘[What is the potential for open banking in Mexico?](#)’³⁶. Much of this roadmap could apply to Open Communications.

8.11 In terms of a sequence, the roadmap suggests the following be the foundations for a sustainable Open Communications infrastructure:

- research consumer needs
- agree desired objectives and impact targets
- assess the capability of the financial sector to implement
- establish an Open Communications working group (OCWG)

³⁴ NESTA Open UP Challenge <https://www.openbanking.org.uk/insight/open-up-challenge/>

³⁵ Open Data Institute (n.d.), “Arup builds a network of innovators”, <https://theodi.org/project/arup-builds-a-network-of-innovators/>

³⁶ Open Data Institute & C Minds (2018), “What is the potential for open banking in Mexico?”, <https://cminds.pubpub.org/pub/openbankingmx>

- create a cross-sector group among government agencies
- introduce milestones for standards development and expansion
- agree on the long-term funding and governance model
- set up an Open Communications-specific regulatory sandbox to test innovations
- encourage engagement across the communications sectors and beyond

8.12 Grow the ecosystem, by:

- supporting organisations that will help deliver desired objectives
- building the capability of the UK communications sector to deliver the roadmap
- running innovation challenges and pilots that encourage industry to develop solutions that use Open Communications
- reviewing complementary legislation
- developing and/or contributing to an international peer network

8.13 Learn and adapt, by:

- building a monitoring framework for assessing whether risks have manifested
- measuring the success of the initiative over time

Question 9: Do you agree with our view of the data that Open Communications should make available to third parties? Is there data about accessibility needs or vulnerable circumstances that people would benefit from being able to share with third parties? [Section 7]

9.1 Overall we agree with Ofcom's view of the data that Open Communications should make available to third parties, however more data could be made available if the right security and privacy-preserving processes are put into place.

9.2 As discussed in question 3, additional data that could be made available includes mobile location data from cell phones, eSims in connected devices and others could be made available. This could allow communications customers to be more active participants in their communities, such as through the data pooling and opting in to 'open city' initiatives and services as mentioned above.

9.3 We believe that the 'Product data that providers would make available to third parties' which includes 'Details about the retail offerings of the provider', 'Details about availability, speed and service quality commitments' and 'Details about the service quality that customers have experienced', should be published under an open licence such as CC0, CC-BY, or CC-BY-SA. From the consultation document, this data does not appear to contain personal data or data that is commercially sensitive enough not to be made available to the public.

9.4 Other communications data held by service providers that should be made as open as possible with appropriate safeguards is included in our research on [potential open APIs for the telecoms sector](#).³⁷ These include:

- Account creation

³⁷ Projects by IF (2018), "Open APIs in the Telecoms Industry", <https://openapis.projectsbyif.com/>

- Account closure
- Creation, updates and deletion of account holders
- Access to service-specific usage data, which includes:
 - Calls, texts and data usage
 - Call detail records
 - Detailed network data
 - Location records
 - Social graph
 - Internet connection records
- Deletion of usage data
- Machine-readable policies, including:
 - Terms and conditions
 - Social responsibility policies
 - Data protection and privacy policies
 - Site-blocking policies
- Access to anonymised bulk data

9.5 Making these APIs available isn't enough on its own. Real consideration needs to be given to designing access control and permissions systems that are both secure and legible to the people using them.

9.6 We would like to see Ofcom and other organisations provide access, where possible, to aggregated data to benefit researchers and to help design better models and future opportunities. Access to this aggregated data could be facilitated by a [data access initiative](#)³⁸ or a [data institution](#)³⁹ such as a [data trust](#).⁴⁰ We would like to see Ofcom investigate the potential of this kind of access to data to support the communications sector, especially with the goal of tackling social, economic and environmental challenges. Streamr and GSMA have already begun this type of work with their 'Data Unions' pilot.⁴¹

9.7 [Our research on the protected characteristics of people using digital public services](#) has shown that digital public services are often not adhering to the equalities law and are not collecting protected characteristics to know who is being excluded and/or discriminated against and why.⁴² To ensure exclusion in Open Communications is not a problem, we would recommend the option for a customer to provide anonymous protected characteristics is built into services.

³⁸ Open Data Institute (2020), "What do we mean by data institutions?", <https://theodi.org/article/what-do-we-mean-by-data-access-initiatives/>

³⁹ Open Data Institute (2020), "What do we mean by data institutions?", <https://theodi.org/article/what-do-we-mean-by-data-institutions/>

⁴⁰ Open Data Institute (2019), "Data trusts: lessons from three pilots (report)", <https://theodi.org/article/odi-data-trusts-report/>

⁴¹ Streamr (2020), "News: Streamr partners with GSMA to deliver Data Unions to the mobile sector", <https://medium.com/streamrblog/news-streamr-signs-pilot-agreement-with-gsma-d1a8a7155a01>

⁴² Open Data Institute (2020), "Monitoring Equality in Digital Public Services (report)", <https://theodi.org/article/monitoring-equality-in-digital-public-services-report/>

Question 10: What are your views on the appropriate arrangements for determining liability and redress in disputes between customers, providers and / or third parties? [Section 7]

N/A

Question 11: Do you agree that we have identified the main sources of costs for implementing Open Communications for both providers and services that use Open Communications data? Are there any sources of costs that we have missed? [Section 8]

N/A

Question 12: What factors will drive the overall scale of costs to in-scope communication providers and to third parties? How might this level of cost vary depending on whether providers serve residential and / or business customers? [Section 8]

12.1 There will likely be higher costs for creating standards where existing standards could be adopted, such as from open banking (e.g. identifiers, APIs, OAuth).

12.2 [Open standards for data](#) are reusable agreements that make it easier for people and organisations to publish, access, share and use better quality data.⁴³ Ofcom should focus on adopting open and common standards for data in order to not only increase data interoperability, but also to reduce costs across the system.

Question 13: If relevant, please estimate and describe, as far as possible, the costs to your organisation of implementing and running Open Communications. [Section 8]

N/A

Question 14: If relevant, would your organisation consider using Open Communications data as a third party to offer new services or enhance existing ones?

N/A

⁴³ Open Data Institute (2018), '[Open Standards for Data](#)'