

<b>Title:</b> Open Communications Initiative <b>IA No:</b> <b>RPC Reference No:</b> RPC-DCMS-5158(1) <b>Lead department or agency:</b> DSIT <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 06/09/2023		
	<b>Stage:</b> Development/Options		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary		
<b>Contact for enquiries:</b> ed.rawcliffe@dsit.gov.uk			
<b>Summary: Intervention and Options</b>		<b>RPC Opinion: Informal - no rating provided</b>	

**Cost of Preferred (or more likely) Option (in 2019 prices)**

Total Net Present Social Value £m	Business Net Present Value £m	Net cost to business per year £m	Business Impact Target Status Qualifying provision
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**What is the problem under consideration? Why is government action or intervention necessary?**

Open Communications aims to provide consumers with access to key information about their telecoms service (such as price, usage and download speeds) held by their internet service provider (ISP) to address a number of issues in the market. Telecoms is a complex market to navigate, requiring time and technical knowledge for consumers to compare and choose deals. The impact of this complexity is limited market engagement, low switching rates and persistent loyalty penalties, with around a third of consumers out of contract and paying more than necessary for connectivity services. Intervention is required to address information asymmetries, improve consumer engagement and switching in mobile and broadband, increase telecoms innovation and competition and drive take-up of new services such as gigabit-capable connections and 5G.

**What are the policy objectives of the action or intervention and the intended effects?**

Open Communications seeks to use pending Smart Data powers, to give consumers the ability to securely share their data with third parties. Key objectives of this are to improve consumers' information on their usage and different deals; lower frictions to data sharing; improved consumer engagement, trust and satisfaction; increased telecoms competition and innovation through access to data. Measurably, this may increase switching rates in telecoms markets, lower the loyalty penalty (price disparity between active and passive/end-of-contract customers); increase new services and applications in telecoms; and increase business investment and formation.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

- **Option 0 - Do nothing:** No additional mandatory data portability requirements, leaving industry to voluntarily design data sharing arrangements beyond current requirements as enshrined by the GDPR.
- **Option 1 - Non-regulatory implementation:** the Government would pursue the development of an Open Communications scheme with industry and third-party providers without the use of legislation - by working with industry to get a unified and comprehensive scheme in place.
- **Option 2 - Interim implementation of Open Communications:** Using primary Smart Data powers, planned to be implemented by DBT, require telecoms firms to make relevant customer data downloadable on request, in a standardised format and able to be shared with third-parties, but limiting ongoing access to this data.
- **Option 3 - Full implementation of Open Communications:** Through Smart Data, enable comprehensive data portability and mandatory participation for telecoms companies, requiring (consented) ongoing data sharing, access to approved third parties and APIs; consistent, readable formats; likely driving new services.

Is this measure likely to impact international trade and investment?		Yes		
Are any of these organisations in scope?	Micro - Yes	Small - Yes	Medium - Yes	Large - Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions?		Traded: N/A		Non-traded: N/A
<b>Will the policy be reviewed?</b> It will be reviewed. <b>If applicable, set review date:</b> To be determined				

*I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.*

Signed by the responsible :

Tom Eland

Date:

06/09/2023

## Summary: Analysis & Evidence

## Policy Option 2

Description: Interim/Partial Open Communications

### FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

#### Description and scale of key monetised costs by 'main affected groups'

The main costs from Option 2 on businesses would be ongoing costs of making customer data available. While likely lower than the costs for Option 3, providing data in consistent format (such as CSV files) would require IT and organisational costs.

#### Other key non-monetised costs by 'main affected groups'

There may also be costs to businesses (in funding the scheme) and to third-parties (in accreditation and participation). Additionally, consumers may incur some time costs to access and assess their data, although this is voluntary.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

#### Description and scale of key monetised benefits by 'main affected groups'

We expect the main benefits for Option 2 to be similar to Option 3 but smaller in magnitude. The increased access to data for consumers will improve information available, likely to improve decision making and greater switching. However, the limited ongoing access to consumer data for third parties may reduce the amount of new services and innovation enabled by data portability, with lower third party benefits and reduced time savings.

#### Other key non-monetised benefits by 'main affected groups'

Many of the benefits from Option 3 - in terms of competition, innovation, better consumer decision making, equity and distribution - are possible under Option 2. Authorised third party providers (e.g. price comparison engines) would theoretically be able to use the CSV files to generate new services in the market. However, the more limited nature of data access may reduce the practical implications of the scheme, due to TPPs and apps less easily interacting with data, potentially reducing the extent to which consumers access their data.

<b>Key assumptions/sensitivities/risks rate (%)</b>	<b>Discount</b>	3.5
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There is uncertainty over the costs to business under this scenario. These are presented as initial, indicative estimates, and we will be seeking further input on exact impacts at a later stage. There is also uncertainty over the benefits of such a scheme: we believe that formally improved access to consumer data, such as in Option 2, will result in better outcomes for consumers, but to a much lesser extent than Option 3; this is chiefly due to the assumption of lower third-parties innovation. There is a key assumption regarding the consumer take-up rate of requesting their data, which will drive both costs and benefits.

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>Score for Business Impact Target (qualifying provisions only) £m:</b>
<b>Costs:</b>	<b>Benefits:</b>	<b>Net:</b>	

## Summary: Analysis & Evidence

Policy Option 3

Description: Comprehensive Open Communications initiative

### FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate:

<b>COSTS (£m)</b>	<b>Total Transition (Constant Price) Years</b>		<b>Average Annual (excl. Transition) (Constant Price)</b>	<b>Total Cost (Present Value)</b>
<b>Low</b>	Optional		Optional	<b>Optional</b>
<b>High</b>	Optional		Optional	<b>Optional</b>
<b>Best Estimate</b>				

#### Description and scale of key monetised costs by 'main affected groups'

The main costs of option 3 are setup and familiarisation costs to the scheme, ongoing costs of compliance, providing data on request and maintenance (such as IT systems and data management); and a funding mechanism which may be a levy on industry incumbents and accreditation fees for third parties.

#### Other key non-monetised costs by 'main affected groups'

There may be costs to some consumers in the form of higher prices, but this represents more balanced pricing practices and is reliant on the ability for telecoms markets to pass higher prices through. There may also be time costs to consumers in researching deals, but this is expected to be voluntary.

<b>BENEFITS (£m)</b>	<b>Total Transition (Constant Price) Years</b>		<b>Average Annual (excl. Transition) (Constant Price)</b>	<b>Total Benefit (Present Value)</b>
<b>Low</b>	Optional		Optional	<b>Optional</b>
<b>High</b>	Optional		Optional	<b>Optional</b>
<b>Best Estimate</b>				

#### Description and scale of key monetised benefits by 'main affected groups'

The direct beneficiaries of the scheme are expected to be primarily consumers and third-parties, and there may be benefits to current telecoms firms and to the public sector (through increased competition, access to data and reduced regulatory burden). Consumers can expect increased access to their own data, enabling new services, price/deal comparison tools, lower search costs (time savings) and behavioural barriers to switching, empowering greater consumer action, improved choices and lower expenditure. Third parties are expected to benefit from improved access through new services and productivity.

#### Other key non-monetised benefits by 'main affected groups'

Indirect benefits for consumers include improved data security, reduced fraud and equity and services for vulnerable individuals; benefits for businesses include greater telecoms competition (reduced barriers to entry and new business formation), new services/sales from increased access to data. There may also be reduced regulatory burden through competition and innovation.

<b>Key assumptions/sensitivities/risks (%)</b>	<b>Discount rate</b>	3.5
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There are some potential risks associated with Open Communications, in particular around underestimating the costs to business. There is also a key assumption regarding the consumer take-up rate of requesting their data, which will drive both costs and benefits.

## BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	Benefits:	Net:	



Department for  
Science, Innovation  
& Technology

# Open Communications Initiative

## Consultation Stage Impact Assessment - DSIT, September 2023

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## Evidence Base

### 1. Overview, problem under consideration and rationale for intervention

#### 1.1 Overview

This consultation stage impact assessment (IA) accompanies the consultation on the Government's proposals for a data portability scheme in telecommunications,<sup>1</sup> known as Open Communications. Data portability allows individuals to move, copy or transfer their personal data across different services safely.

A level of data portability is supported under the General Data Protection Regulation (GDPR) on personal data, which compels businesses to provide people with data held on them in an electronically readable format. However, such data requests are not always provided to common standards, and data access is often not secure, timely or ongoing.<sup>2</sup>

Some industries already offer data portability schemes, such as Open Banking, or are planned such as the DESNZ and CMA led Road Fuel Data Scheme<sup>3</sup>. Through enabling access to customer data, on consumption and transactions for example, industries may benefit from data availability. By enabling more transparent markets, in which consumers can clearly see their usage and spending, buyers are empowered to make informed choices. In turn this encourages improved products, spurring competition to provide better, innovative services. Without data portability, businesses can capitalise on customers failing to engage effectively when faced with uncertainty and complexity.

There are not yet common, agreed data portability standards within telecoms. Yet, characteristics of the sector mean that data portability holds great potential in helping consumers - which is particularly important as people contend with the rise in the cost of living. Telecoms markets are complex, and navigating a wide array of options can be technical and time consuming. Despite great variation in consumer characteristics, requirements and usage, there is good evidence that consumers often fail to engage in the market, opting to stay with current providers even when this comes at a high cost.

#### Smart Data

Smart Data is a specific data mobility initiative, currently led by the Department for Business and Trade (DBT). Smart Data refers to the secure, consented sharing of consumer and product data with third-party providers (TPPs) who can use this data to provide innovative services for consumers and SMEs.<sup>4</sup> It is an extension beyond GDPR data access rights. The key features of Smart Data and its implementation are discussed in the Section 3 on Policy Options.

Open Communications acts upon Smart Data powers specifically in telecoms, mandating extended consumer data access and setting common standards. It will focus on enabling end-users, from consumers to small businesses, to navigate the communications market, allowing informed decisions, assisting users accessing the connectivity they need at the best possible price. Open Communications is expected to have significant benefits for consumers and SMEs, playing a key role in increasing take-up of next generation connectivity services, and empowering consumers and SMEs to switch to the best deals to meet their connectivity needs as well as their household budget.

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<sup>1</sup> DRAFT: DSIT (2023) [Designing the Open Communications Initiative](#)

<sup>2</sup> Wong & Henderson (2018): "How Portable is Portable? Exercising the GDPR's Right to Data Portability" Study, Jeni Tennison (December '17): "Data portability" Blog, ODI (February '18): "Will GDPR and data portability support innovation?" Blog, Jason Furman & Digital Competition Expert Panel (March '19): "Unlocking digital competition" Report

<sup>3</sup> Competition and Markets Authority (2023) [What we're doing to provide access to road fuel price data](#)

<sup>4</sup> Such TPPs would need to be authorised to participate in smart data schemes.

Ofcom published responses received to an Open Communications consultation<sup>5</sup> which ran from August to November 2020 and outlined initial considerations for Open Communications, the case for change, and its potential implementation. Ofcom offered an update in July 2021,<sup>6</sup> summarising responses in order to develop understanding and improve key policy questions.

Ofcom's consultation highlighted that opinions were mixed over support for an Open Communications scheme, with some supporting the scheme as described, others agreeing in principle with amendments, and others disagreeing on the need for a scheme and outlining costs to business. Some incumbent telecoms businesses disagreed with the benefits for data mobility, arguing that consumers were adequately informed, engaged and had opportunities to switch. Others, particularly consumer groups and digital comparison tools, highlighted that a data portability scheme could address persistent issues in the industry, help vulnerable consumers and drive innovation and greater customer satisfaction. Further discussion of the consultation response is given in Box 2 in Section 2.2.

The 2023 DSIT Open Communications Consultation, which this document accompanies, aims to continue this policy development, outlining and seeking input on the potential design of legislation.

### **Telecommunications market characteristics**

The telecoms sector is a critical and valuable industry, helping connect the UK's residents and businesses and enable vital services including fixed and mobile telephone services, broadband and mobile internet. By economic contribution, the telecoms sector delivered around 2% of UK GVA in 2020.<sup>7</sup> Telecoms services are used by the vast majority all UK households: around 96% of UK households have internet access<sup>8</sup>, and 90% of UK adults have a smartphone for personal use.<sup>9</sup>

Telecoms goods and services constitute a significant amount of household expenditure. According to the ONS, total spend across 'Communication'<sup>10</sup> made up 4% of household spending, at around £21 per week, between April 2021 and March 2022. The ONS family spend data states that the average household spends £9.90 p.w on combined telecoms services, (a subset of 'communication') which makes up just 2% of the average weekly expenditure of £528.80<sup>11</sup>. According to Ofcom, fixed and mobile spend stood at around £79 per month on average in 2022.<sup>12</sup>

**Figure 1: Average household spend on telecoms and communications 2013-2022**

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<sup>5</sup> Ofcom (2020) [Open Communications: Enabling people to share data with innovative services](#)

<sup>6</sup> Ofcom (2021) [Update on Open Communications: Enabling people to share data with innovative services](#)

<sup>7</sup> Telecoms contributed 1.8% of UK GVA in 2020 ([Digital sector estimates](#) )

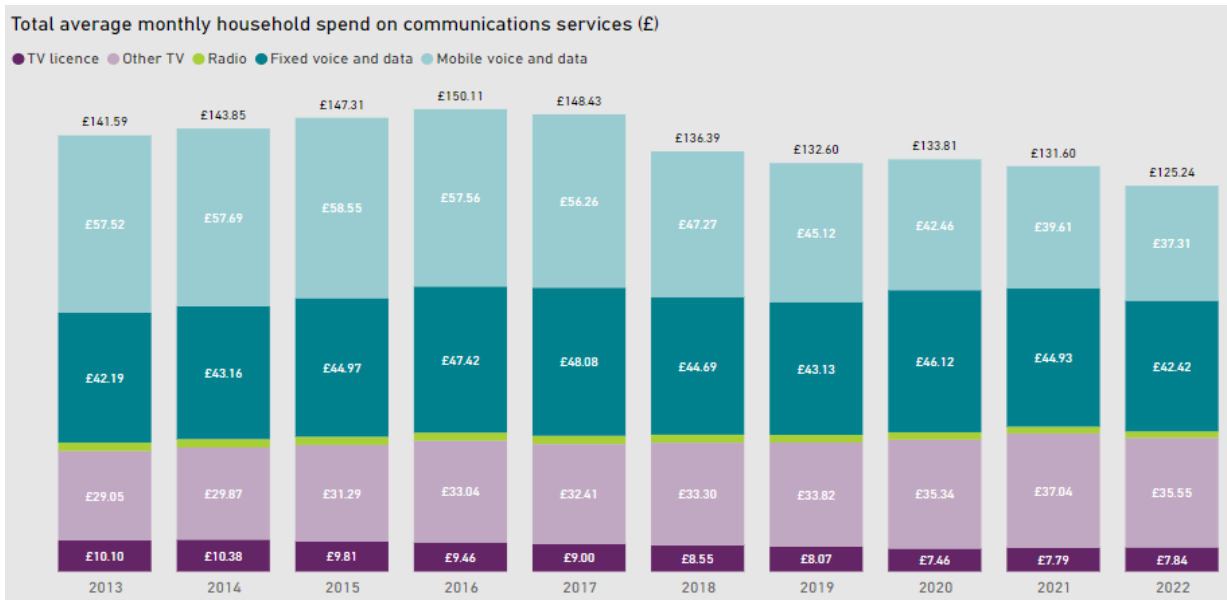
<sup>8</sup> [Internet access – households and individuals, Great Britain: 2020](#)

<sup>9</sup> [Communications Market Report 2022 - Interactive data - Ofcom](#)

<sup>10</sup> ONS family spending 04-21 to 03-22 (released 2023); 'Communication' includes telecoms

<sup>11</sup> ONS (2023) [family spending in the UK: April 2021 to March 2022](#)

<sup>12</sup> [Ofcom's Communications Market Report 2021](#)



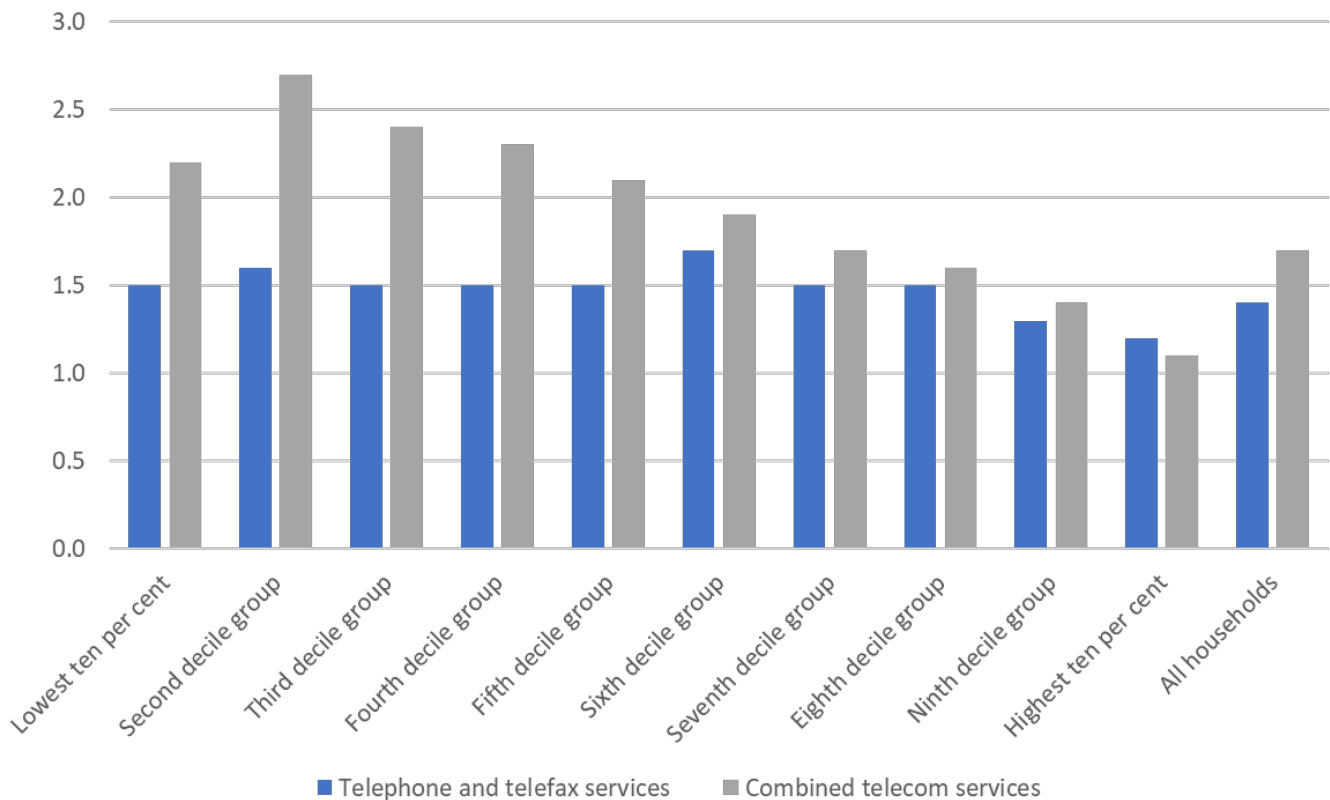
Source: Ofcom Communications Market Report 2023<sup>13</sup>

Telecoms services are increasingly viewed as a necessity for the vast majority of households, as a means to access education, engage in the labour market and communicate with friends and family. It is commonly considered a necessity good, without close substitutes and purchased by all income groups. Furthermore, expenditure on telecoms as a proportion of total spending decreases for higher disposable income decile groups, as shown by the below ONS data. The first income decile group may benefit from discounted services, such as internet service providers offering low income broadband deals, such as social tariffs - typically reserved for customers who receive financial support such as Universal Credit. Nonetheless, spending on telecoms is a substantial financial outlay, particularly for poorer households, with the second decile group spending almost 5% of expenditure on communications. The Ofcom 2023 Affordability Tracker suggested that around one in three households had had an affordability issue with at least one communications service (9% for fixed broadband and 7% for mobile) in the most recent month.<sup>14</sup>

**Figure 2: Household expenditure on telecoms as a % of total expenditure by disposable income decile group**

<sup>13</sup> From Ofcom (2023) Communications Market Report [interactive data](#). Notes: Adjusted for CPI at 2022 prices. Historic telecoms figures have been restated, so are not comparable to those published in previous Ofcom reports. Mobile telecoms household spend from 2020 does not include spend on handsets due to a change in accounting standards. Television includes spend on OTT subscriptions, download-to-own and pay-per-view online TV services.

<sup>14</sup>Ofcom (2023) [Affordability of communications services](#)



Source: ONS Family spending in the UK<sup>15</sup>

The COVID-19 pandemic impacted the market, increasing reliance on internet access whilst exacerbating household financial pressures, with consumption patterns changing in line with lockdowns and economic uncertainties.

More recently, cost of living pressures have had a significant impact on the market as well as consumers' budgets. Cost pressures driven by inflation have fed through to the telecoms market, with recent mid-contract price rises of over 14% implemented by all four MNO's. The last four Ofcom Telecoms Affordability reports (dating back to June 2022) have estimated that around one in three households have a telecom affordability issue, roughly doubling since 2021.

Full fibre broadband and advanced wireless networks, including 5G, are in the process of being deployed on a wide scale, giving household, retail and business consumers access to faster, more reliable, more resilient fixed-line and mobile connectivity. Ensuring consumers can understand these new products will increase commercial opportunities and innovation of suppliers.

Ofcom's recent Connected Nations report<sup>16</sup> outlined the continuation of 5G deployment, with 82% of premises being able to get a 5G signal outdoors with a high degree of confidence, up from 57% in 2021. Despite this, 4G continues to underpin the mobile experience in the UK, with the Shared Rural Network expanding this coverage. The coverage and benefits to 5G are not yet being widely seen within UK society, making it harder for consumers to accurately compare 4G and 5G and calculate their capability needs, thereby increasing the complexity of telecoms products and services on offer.

As the sector evolves in both complex and technical ways, it becomes increasingly difficult for those unfamiliar with the telecommunications sector to navigate their way through the market. Such complexity prevents many consumers from understanding the type of connectivity they have, what they need, and whether they are receiving value for money in their current contracts. Complexity reduces switching rates, and

<sup>15</sup> ONS (2021) [Family spending workbook 1: detailed expenditure and trends](#). Notes: For FYE 2019 onwards, telephone and telefax services exclude payments made as part of a combined bill. Combined telecoms services is a new category for FYE 2019. This encompasses all telecoms bills that include more than one service. Due to the nature of combined packages, this also includes packages that include television services.

<sup>16</sup> Ofcom (2023) [Connected Nations interim update, Spring 2023](#)



may enable firms to maintain market power. Although under GDPR businesses must provide personal data in an electronically readable format, this can take consumers up to 30 days to acquire, with no common standards for data sharing and security. Therefore, data portability initiatives are crucial to empowering consumers within the market to make better-informed decisions.

The OECD has outlined that complexity in telecoms markets may lead to lower consumer satisfaction, reluctance to switch to better deals, and difficulty comparing products.<sup>17</sup> Although there may be benefits of moving to a new service or provider, this often involves prediction and understanding of the new service relative to current provision, or fears regarding the potential risks associated with switching. Telecoms products are particularly susceptible to choice or information overload, whereby consumers having too many products or features to compare may experience increased anxiety about the possibility of making a bad choice, and lead to reduced consumer action or suboptimal choice.

The potential consumer detriment as a result of a difficult to navigate market is particularly concerning in the context of the rise in the cost of living.

## Helping consumers

Actions have previously been taken by Ofcom to encourage data mobility and empower consumers, in response to the low uptake of digital comparison tools used to compare deals across fixed line, broadband, pay TV and mobile services. Ofcom's changes have included:

- End-of-contract notifications and annual best tariff notifications: New rules introduced in February 2020 require phone, broadband and pay-TV companies to notify customers, between 10 and 40 days before their contract ends, about how much they will pay after this point, and to provide information on the provider's best deals, including any prices available only to new customers.<sup>18</sup>
- Proposing new measures to require communications providers to make more information about their services available to digital comparison tools (from the European Electronic Communications Code)
- Introducing Auto-Switch, a new Ofcom regulation in mobile, with proposed rules to make switching easier and more reliable. It allows customers to control the contact you have with their mobile provider without having a phone conversation with them.

Data mobility initiatives including Open Communications serve as a complement to these efforts, to improve the ease of use of digital comparison sites through setting clear standards on the sharing of data in accessible formats.

## 1.2 Problem under consideration

Despite initiatives to improve consumer information and outcomes in telecoms, there remain issues and barriers to optimal outcomes for consumers. These are apparent in terms of persistent loyalty penalties for some consumers, often vulnerable individuals, and there remains barriers/frictions preventing switching to potentially better suited deals. Open Communications proposals aim to improve some of these outcomes by increasing data access, enabling innovation and new services as well as helping consumers more easily identify products that suit their connectivity needs as well as household budgets.

As discussed above, telecoms are a basic necessity for UK households, requiring a substantial financial cost to access reasonable standards. The average UK household spent around £79 per month on telecoms services in 2022<sup>19</sup>. This figure has remained fairly flat over time, and is likely to remain a considerable household expense. Additionally, a wide array of fast-changing products and bundles makes it difficult for consumers to effectively compare products, often offered long-term contracts and with barriers to switching.

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<sup>17</sup> OECD (2009) Enhancing Competition In Telecommunications: Protecting And Empowering Consumers

<sup>18</sup> Ofcom (2021): [Pricing trends for communications services in the UK](#)

<sup>19</sup> Ofcom (2023) Communications market report

We identify several overarching problems within the telecoms markets, which this intervention is designed to address:

### Market complexity

A well functioning market is one where consumers have reasonably clear and complete ('perfect') information on what they purchase. In telecoms, this represents clear information about consumer consumption of telecoms products, such as mobile phone tariffs, data consumption, call minutes, internet speed requirements and use.

As most telecoms products are bought on pre-pay contracts, this requires good knowledge of past and expected future consumption, and a sense of value of improved quality, reliability, speed and spare capacity. Given this knowledge, consumers can then choose between the services best suiting their needs and budget.

Much of this information about consumers is available to providers but less frequently accessed or accessible by consumers.<sup>20</sup> Software advances have enabled providers to gain valuable data on customer characteristics and consumption behaviours, which enables them to offer tailored packages to consumers and SMEs. At present, under rights of access, such data can be acquired by consumers but requires significant time and effort to navigate complex, technical markets and to understand their own usage. As a consequence, there exist **information asymmetries** whereby consumers hold less knowledge of their demand for products and services relative to sellers. Asymmetry can disadvantage consumers, who base decisions on outdated or incomplete information, hindering their ability to optimally choose in line with actual consumption patterns. A 2018 study by uSwitch found phone owners were paying for an extra 3.4GB of data every month<sup>21</sup>, costing consumers £165m. It states that 21% of customers don't know their data allowance (26% for over-55s), and 36% do not keep track of their data usage<sup>22</sup>. This wastage has been exacerbated by the pandemic, whereby Wi-fi connections have been greater. This is a particular concern in the context of the rise of the cost of living. Sky Mobile, which lets customers save up unused data for later, identified 5.4 million GB of unused data among their mobile account holders between March and May 2020, saving consumers £36 million<sup>23</sup>. This suggests accounts with providers who do not offer this rollover feature are likely to be losing money to underconsumption of their data allowance, and therefore could benefit from knowing their demand for products and services.

Providers have less incentive to rectify these asymmetries by co-operating to simplify the market, as they are able to benefit from this complexity, such as through reduced switching rates and charging higher prices to long-term customers who may be resistant or unable to change, also known as the 'loyalty penalty'. Where providers choose not to cooperate, through sharing data in the interest of consumers and facilitating cross-sector innovation, **network failures** arise. In a similar way, without sharing data and better informed consumers, businesses can benefit from less competition and subsequently, **market power**. When data is not widely shared with consumers, new businesses and technologies providing innovative services cannot easily enter the market. This enables incumbents to gain at the expense of customers through reduced consumer surplus, and society as a whole, a deadweight loss.

These market failures will be explored further in Section 1.3. These failures prompt the following problems for consumers:

#### a) Insufficient switching rates

Research finds that many consumers in the telecoms market have never switched providers, and that many long-term subscribers can be resistant to switching, a phenomenon found across different telecoms

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<sup>20</sup> See, for example Lenard (2020) [If Data Portability is the Solution, What's the Problem?](#)

<sup>21</sup> Which? (2018): Brits waste 3.4GB of data a month: how to avoid overpaying

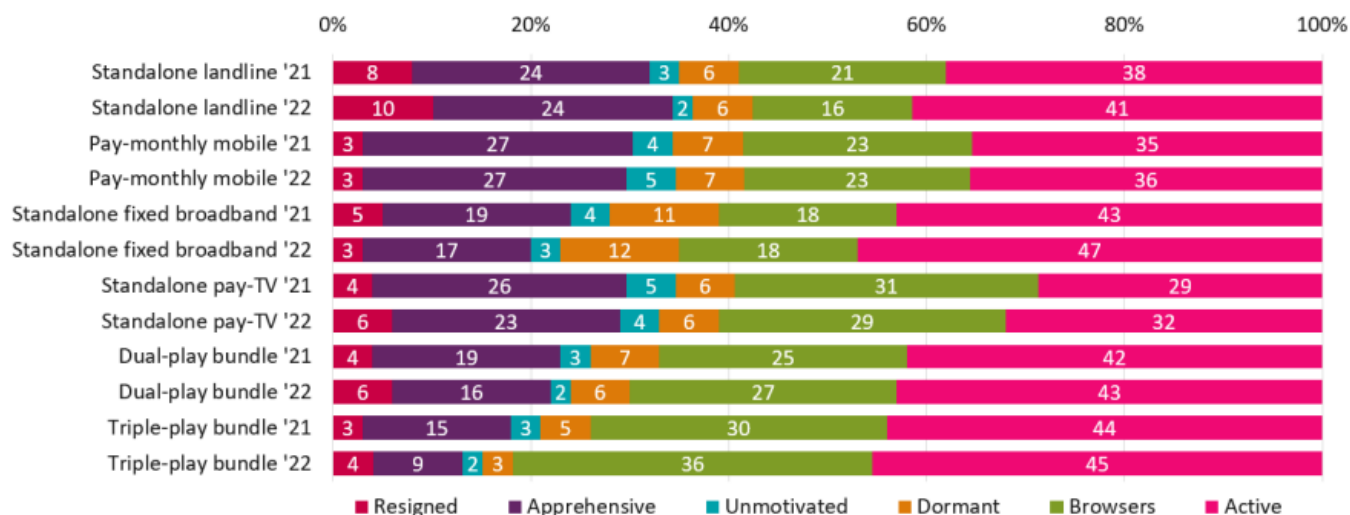
<sup>22</sup> Mobile Marketing article (2018): [UK mobile users wasting 143 GB of data every month, uSwitch study finds](#)

<sup>23</sup> What Mobile article (2020): [Sky Mobile offers its customers the chance to rollover unused mobile data](#)

markets.<sup>24</sup> Vulnerable consumers, including elderly and low income households, often fall into this bracket due to difficulty engaging with the complexity of the market, often paying higher prices as a result.

While many customers are actively engaged and likely to switch or browse better deals, there remains a significant proportion of consumers who are disengaged in the market and unlikely to switch. Ofcom's 2022 Switching Tracker Engagement Index defines these as unmotivated, apprehensive or resigned types of consumers.<sup>25</sup> These constitute between around 15%-36% of customers by telecoms product.

**Figure 3: Switching Tracker Engagement Index 2022**



Source: Ofcom Pricing Trends 2022<sup>26</sup>

When considering switching, consumers weigh up the benefit of switching and the cost, time and effort. In the telecoms market, the latter may be perceived to be significantly higher due to market complexities, making consumers unlikely to switch even where the benefits of switching are large. The benefits of switching may also be harder to calculate, requiring customers to understand their demand for telecoms services, and compare offers to find the best deal for their needs. Without a clear understanding of the benefit, consumers are less likely to make the effort to switch. Even when consumers decide to switch, a 2021 report by the Gigabit Take-up Advisory Group<sup>27</sup> (GigaTAG) found that consumers face restricted opportunities to switch. Low switching prompts further issues within the market, like loyalty penalties and ineffective competition.

**Figure 4: Percentage of consumers switching in the past 12 months**

<sup>24</sup>Lunn & Lyons (2018) [Consumer switching intentions for telecoms services: evidence from Ireland](#)

<sup>25</sup> Unmotivated being 'confident with aspects of engagement but have not made any changes to their service in at least the last two years, and are not planning to'; Apprehensive being 'not confident and have not made any changes to their service in at least the last two years, nor are they planning to'; Resigned being 'unhappy with their existing service and have not sought to engage in at least the last two years, and are not planning to'.

<sup>26</sup> Ofcom (2022) [Pricing Trends Report](#)

<sup>27</sup> In August 2021, the Government commissioned Which?, the Federation of Small Business (FSB) and the Confederation of British Industry (CBI) to set up GigaTAG, which undertook work to understand the barriers consumers and SMEs face in taking up gigabit broadband services, and develop recommendations to tackle them.

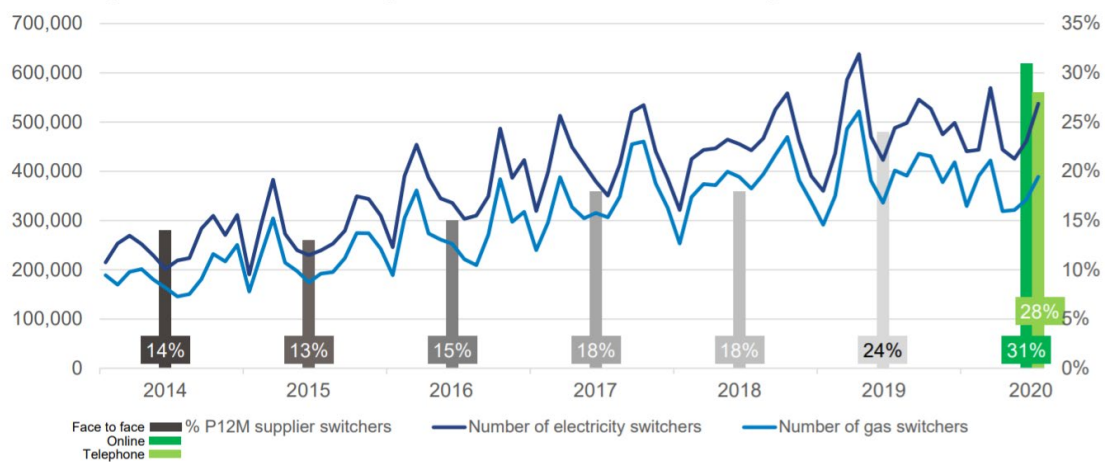


% switched in last 12 months (from date of interview in 2022)	Standalone landline			Mobile		Pay-TV		Fixed broadband		Dual play <sup>1</sup>	Triple play <sup>2</sup>	All decision makers
	Total	No broadband	Broadband with another provider	Contract (standalone)	Prepay	Total	Standalone	Total	Standalone	Total	Total	Total
Base	260	118	142	2043	519	1350	443	2673	644	915	511	3334
Switched total	17%	17%	17%	14%	19%	10%	13%	14%	25%	13%	11%	24%
Switched excl. home movers	9%	6%	12%			6%	7%	9%	14%	10%	9%	21%

Source: Ofcom Pricing Trends<sup>28</sup>

We see a different trend in switching in other markets, Ofgem's updated consumer engagement survey in 2020 (see Figure 5), shows consumer switching rates among gas and electricity suppliers to be on the rise. 2019 estimates of switching levels held at 24%, rising to 28% in 2020 according to their telephone surveys; online estimates present higher switching rates at 31%. These are notably higher than the communications switching rates reported in Figure 4, however, these totals do include home movers, with moving home listed as one of the prompts for switching.

Figure 5: Supplier switching in gas and electric markets<sup>29</sup>



Source: Ofgem (2020): 'Which, if any, of these have you or your household done in the past 12 months?'<sup>30</sup>

### b) Lack of data empowerment

In the telecoms market, providers have built a wealth of data surrounding individuals' characteristics and consumption patterns,<sup>31</sup> with the benefit of being able to tailor offers to the consumer. However, this may also be used to obfuscate benefits and hide costs,<sup>32</sup> making it harder for consumers to compare deals and ultimately increasing the complexity of the market. Under the UK General Data Protection Regulation (GDPR), businesses have to provide personal data in an electronically readable format, but only within 30 days, with no common standards for data sharing and security.

The UK's 2020 National Data Strategy outlines the great potential for personal data to empower individuals in enabling better choices and outcomes.<sup>33</sup> However, other research suggests this potential may be unfulfilled,

<sup>28</sup> Ofcom (2022) [Pricing Trends Report](#)

<sup>29</sup> Chart taken from [Ofgem Consumer Survey 2020](#)

<sup>30</sup> Ofgem (2020) [Switching data](#)

<sup>31</sup> Department for Business, Innovation and Skills (2012): [Midata Impact Assessment](#)

<sup>32</sup> Department for Business, Innovation and Skills (2015): [Switching principles](#)

<sup>33</sup> DCMS (2020) [National Data Strategy](#)






due to lack of trust or uncertainty about how data is used in digitally-enabled services.<sup>34</sup> Similarly, a 2019 report from Ipsos indicates a 'lack of knowledge and of trust around the usage of personal data', particularly in Britain. According to the report, 30% of Britons surveyed knew 'a great deal about what data companies hold about them' and 27% were 'confident of what they do with this data'.<sup>35</sup> However, Deloitte finds that individuals may be becoming less concerned about use of their personal data online, signalling an increasing acceptance to the benefits of selectively using their personal data.<sup>36</sup>

This creates a lack of data empowerment for consumers, who may not feel confidence in readily accessing the information businesses hold on their demand for telecoms products, and when they do, may struggle to comprehend this data well enough to use it to participate in the market, and compare deals. If information asymmetries were removed, and consumers were empowered to access, understand and use their data to participate in the market, better choices could be made on choosing the best deal to suit their needs. They would be better able to switch between deals, and new innovative services may enter the market to help consumers make the best use of their information.

### c) Loyalty penalty

There is strong evidence of a loyalty penalty in several telecoms markets, with consumers overpaying for identical products. Such penalties have large costs on consumers, reducing customer satisfaction and reducing disposable income, particularly lower income or vulnerable groups. The specific impact the loyalty penalty may have on lower income or vulnerable groups is of particular concern in the context of the rise in the cost of living. Analysis from Ofcom has estimated broadband customers to be collectively overpaying £485 million per annum, or 3.47% of retail fixed voice and data revenue<sup>37</sup>, with out of contract customers paying £5.10 more on average<sup>38</sup>. Mobile customers are found to be overpaying £182 million per annum for mobile services, or 0.48% of total retail mobile voice and data revenue.<sup>39</sup> In response to the Citizens' Advice super-complaint in 2018, regulators have estimated the penalties paid across their 5 identified markets to total £3.4bn<sup>40</sup>. Figure 6 below shows a breakdown of this. Though mobile and broadband estimates present the lowest figures in the table, differences in the size and features of the other markets present difficulties in comparing across industries.

**Figure 6: Overpayment in five essential industries**

Market	Regulator estimates
 <b>Mobile</b>	£182 million
 <b>Broadband</b>	£485 million
 <b>Home insurance</b>	£750 million <sup>1</sup>
 <b>Cash savings</b>	£1.1 billion
 <b>Mortgage</b>	£800 million

Source: Citizens Advice, Loyalty Penalty 2 Year Update (2020)

<sup>34</sup> Citizens Advice (2015) [Personal data empowerment: Time for a fairer data deal?](#)

<sup>35</sup> Ipsos (2019) [Global Citizens and Data Privacy](#)

<sup>36</sup> Deloitte (2019) [Changing attitudes to data privacy: Digital Consumer Trends 2020](#)

<sup>37</sup> Calculated using revenue data from Ofcom 2021 Communications market report

<sup>38</sup> Ofcom (2021): [Telecoms customers saving millions as Ofcom rules bed in](#)

<sup>39</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets, July 2019](#)

<sup>40</sup> Citizens Advice (2020): Loyalty Penalty 2 Year Update



## Box 1: What is the loyalty penalty?

A loyalty penalty occurs when long-term customers, who may be resistant or unable to change providers, are charged higher prices for services which can be consumed more cheaply by those participating frequently in the market. Typically this arises when services are paid for through automatically renewed or 'rolled-over' contracts that place customers onto higher priced 'standard' tariffs. While this can be convenient, it can result in far higher prices for longstanding customers, and deter competitive pricing, improved customer service, and innovative product development.

### What causes loyalty penalties?

Consumers may be reluctant to switch providers for a variety of reasons. The process of switching to a better deal is often considered too complex and time consuming. Citizens Advice found that '10% of respondents with a broadband contract and 8% of those with a mobile handset contract said they had stayed in part because moving was too time-consuming', indicating search costs and switching frictions remain obstacles, despite efforts to tackle this.<sup>41</sup>

Furthermore, incorrect assumptions from individuals often lead to a loyalty penalty. Citizens Advice indicates that many mobile customers mistakenly think that they are on the best deal available - one in three customers stay with their provider believing they have the best deal, although the majority of these are not. Trust also plays a role in customers remaining loyal to their provider. 2020 research from the CMA<sup>42</sup> shows that consideration for fairness and trust in markets will impact consumers' experience in interacting with markets and the price they pay. Around half of broadband customers remain with their provider as they trust them, despite four in five paying a loyalty penalty nonetheless.

There are many non-financial reasons individuals may fail to switch to better deals, despite seemingly in violation of typical rational behaviour. OECD analysis of telecoms markets<sup>43</sup> identifies several behavioural explanations for why consumers switch less frequently or optimally despite theoretically adequate information:

- **Bounded rationality & heuristics** - The computational cost of researching the best available deal leads consumers to take shortcuts in complex environments, to save time and effort, but potentially missing better deals.
- **Choice or information overload** - Consumers facing many products or features may struggle to make direct comparisons and feel anxious about errors, leading to random choice or failure to choose - or 'analysis paralysis'.
- **Endowment** - Studies show if consumers already own a product, they overvalue it and are often reluctant to give it up. For example, consumers may remain with a telephone provider due to loyalty or consideration of sunk costs.
- **Defaults** - The ordering of options or defaults can influence choice. Consumers may prefer a default or 'normal' choice, such as buying 'standard' telecoms bundles even if all features aren't needed.
- **Hyperbolic discounting** - Some consumers may be short-sighted when it comes to future costs and benefits. Some may enter long contracts because of immediate benefits, like a free handset or discounted first month, rather than long-term costs such as data charges or inflexible switching.

### Action to address the loyalty penalty

In September 2018, Citizens Advice submitted a super-complaint<sup>44</sup> on the loyalty penalty across five essential markets - two in telecoms - to the CMA that estimated eight in ten bill payers pay a loyalty penalty, with loyalty costs totalling £4 billion a year. In December 2018, the CMA responded and found customers are overpaying by billions of pounds.<sup>45</sup> The CMA has taken steps to address the impact of the loyalty penalty faced in key markets, including mobile and broadband.<sup>46</sup> The publication of a package of reforms and recommendations has prompted both Ofcom and the FCA to together estimate that a combined 28 million customers were facing a loyalty penalty of £3.4bn in 2019-20<sup>47</sup>.

The CMA found evidence for the use of auto renewals and subscription services to exploit customers, posing additional financial pressure on consumers. Harmful business practices such as subscription traps, complications to cancelling contracts and automatic renewal without permission were found in some markets to be the root cause of a loyalty penalty,

<sup>41</sup> Citizens Advice (2018) [The cost of loyalty: Exploring how long-standing customers pay more for essential services](#)

<sup>42</sup>CMA (2020) [Loyalty penalty update](#)

<sup>43</sup>OECD (2009) Enhancing Competition In Telecommunications: Protecting And Empowering Consumers. See also Hartfree et al. (2016) [Personal current account switching](#)

<sup>44</sup>The report evaluated mobile; broadband; cash savings; home insurance and mortgages

<sup>45</sup>CMA (2018) [Tackling the loyalty penalty: Response to a super-complaint made by Citizens Advice](#)

<sup>46</sup>CMA (2020) [Loyalty penalty update](#)

<sup>47</sup>CMA (2020) [Loyalty penalty update](#)

and require direct action. To combat these, Ofcom agreed voluntary commitments with major providers to protect customers who are out-of-contract, or who face barriers to getting better deals. Commitments include reducing the price differential paid by out-of-contract customers and annual price reviews for their vulnerable customers. Ofcom predicts this could benefit out-of-contract vulnerable customers by £70 each on average and mitigate harm from out-of-contract practices, but as of yet only some providers have taken up voluntary practices

Open Communications is expected to be a complementary initiative to these developments in addressing the loyalty penalty, aiming to improve switching rates and reduce complexity within the market which will allow consumers and small businesses to safely share their data with third parties. This should further tackle the loyalty penalty, by encouraging consumers to find the best deal suited to their needs.

The complexity of the market and reluctance to switch deals can cost consumers significant amounts of money. With the implementation of greater data portability, the entrance of new innovative services, possibly provided by third-party organisations, will reduce the complexity of navigating the market. For example, platforms which can access an individual's data and compare a set of deals most suited to the consumer will improve switching rates, and make the process of switching easier for vulnerable consumers in particular. The CMA<sup>48</sup> found that 97% of internet users are aware of digital comparison tools, and 85% have used one to compare prices, though evidence on switching rates beyond this are harder to find. This will reduce the impact of the loyalty penalty, as consumers are able to become more engaged in the market.

#### d) Ineffective competition

There are potential concerns around competition in telecoms. Although there is no single metric for competition, the CMA's 2020 State of Competition report assesses industries across metrics including concentration, dynamic competition, mark-ups, consumer satisfaction and trust, and data on consumer and business experiences during the pandemic.<sup>49</sup> The CMA finds that telecommunications/media is amongst the worst performing industries, consistently 'lower down the rankings when measuring different consumer and business outcomes' and has amongst the lowest satisfaction scores. The CMA's research on the Loyalty Penalty identifies consumer switching as an important driver of competition.<sup>50</sup>

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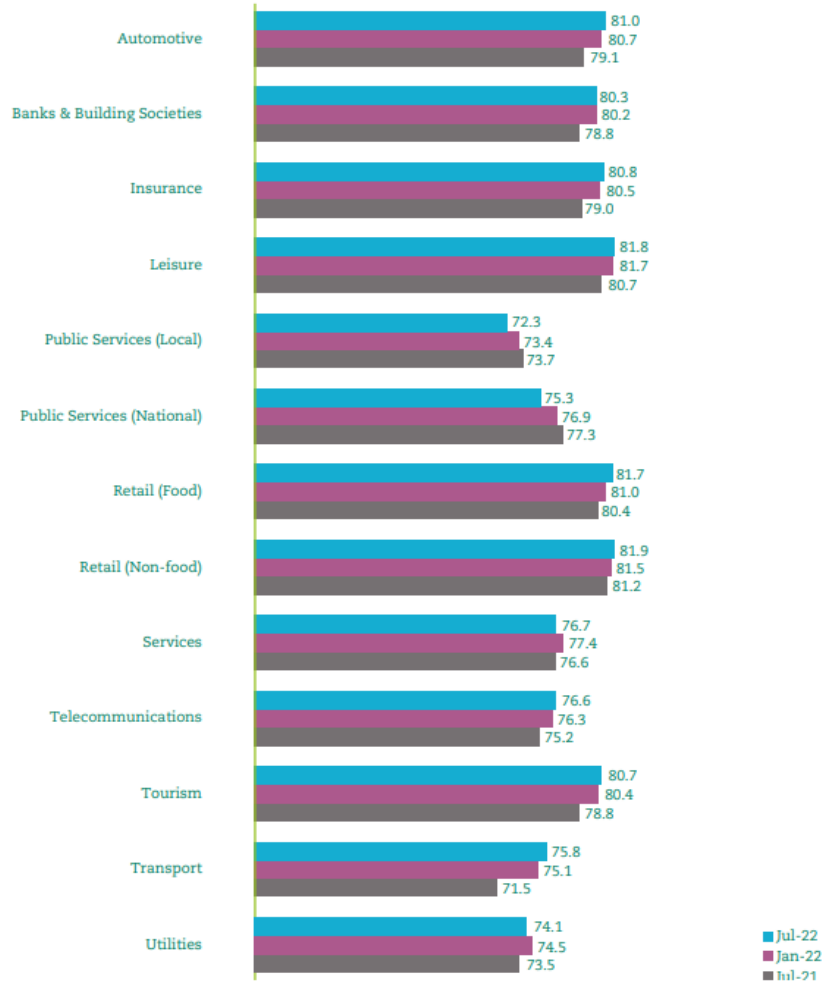
<sup>48</sup> CMA (2017) Digital comparison tools study

<sup>49</sup> CMA (2020) [The State of UK Competition](#)

<sup>50</sup> See [Loyalty Penalty Supercomplaint](#) for further detail on the CMA's findings

Figure 7: ICS's UK Consumer Satisfaction Index (CSI) by sector 2021-22

Customer satisfaction by sector: July 2021 – July 2022



Source: ICS's UK Customer Satisfaction Index (2022)<sup>51</sup>

Effective competition is crucial in many digitally enabled markets, which often feature winner-takes-most characteristics meaning natural competition is not necessarily sufficient to solve problems.<sup>52</sup> One such barrier to competition is unequal access to data, tilted towards incumbents and away from new entrants. Such dynamics have been identified in the 2019 Furman Review which supports policies like open standards, data portability and open data.<sup>53</sup> As noted in the Review, the greatest gains come from 'policies that actively promote competition, foster entry by new competitors, and benefit consumers' including 'measures to promote data mobility and systems with open standards, and expanding data openness'.<sup>54</sup>

*'Active efforts should also make it easier for consumers to move their data across digital services, to build systems around open standards, and to make data available for competitors, offering benefits to consumers and also facilitating the entry of new businesses. Implemented effectively, this approach would be more flexible, predictable and timely.'*

Where consumers are empowered by data and actively engage in the market, they reward better products and spur competition. Participation in the market, and trusted access to consumer data, encourages entry and expansion for both new and existing telecoms providers, who are able to acquire and use individuals' data to create innovative services which better inform consumers and increase competition and dynamic efficiency within the market. New entrants, particularly smaller providers, may be able to provide new data services thereby attracting customers.<sup>55</sup>

<sup>51</sup> [UK Customer Satisfaction Index \(UKCSI\)](#)

<sup>52</sup> Jason Furman & Digital Competition Expert Panel (2019) [Unlocking digital competition](#)

<sup>53</sup> ODI (2019) [Furman Review: Access to data is a new tool against monopoly](#)

<sup>54</sup> Jason Furman & Digital Competition Expert Panel (2019) [Unlocking digital competition](#)

<sup>55</sup> Department for Business, Innovation and Skills (2015): [Switching principles](#)



Whilst there remains a significant proportion of inactive consumers in the market, the effectiveness of competition in the market may be reduced.<sup>56</sup> Across many essential markets, a small number of providers hold a large market share.<sup>57</sup> These providers tend to dominate where services have previously operated under monopolies, such as telecoms and energy services. Weak competition may enable existing providers to use their market power to gain at the expense of inactive customers. Consumer surplus will be drawn down, and a deadweight loss to society will be present through inefficiency.

e) Poor customer satisfaction

As detailed above, telecoms markets ranks among the weakest for poor customer service<sup>58</sup> among regulated markets. Ofcom's 2023<sup>59</sup> comparison of service quality explored the status of customer satisfaction in the UK telecoms sector, finding overall customer satisfaction with mobile, home broadband and landline was consistent with recent years and with little variation between providers, though Mobile Virtual Network Operators (MVNOs) appear to be performing best. Across other sectors, mobile providers' overall service was similar to that of banking and higher than that for gas, electricity, landline and broadband, but there is strong evidence that telecoms customer outcomes can improve.

Ofcom identified some improvements in complaint levels and quicker installation of new lines, however the report found average call waiting times increased, highlighted to be a significant issue given phone calls remain the most common method of contacting providers. Where contacting a provider remains difficult and time consuming, consumers face barriers to improving their awareness of new and existing deals, and potentially switching to a better suited deal, reducing consumer engagement.

Furthermore, Citizens Advice research<sup>60</sup> finds that improved engagement in regulated markets actually lowers satisfaction, as consumers realise the limitations on choice. This supports the need for increased competition in the market. If engaged consumers are dissatisfied with the market, intervention is needed to improve choice alongside reducing complexity, both aims of Open Communications.

f) Search costs

Search costs consist of the time, energy and money expended by consumers when searching for the best deal, including the opportunity cost of the time and effort spent understanding an individual's own demand and comparing the deals on offer in the market. Given the complexity of the telecoms market, this cost is understood to be large for many consumers. Once requesting access to data under GDPR, it can take up to 30 days to receive this information. It may take further time and effort to understand the data, and put it to use in finding the optimal tariff. Beyond this, a consumer would need to collate and compare deals to find one that suits, and then take time to make the switch. Open Communications could reduce search costs by simplifying the access to data, and enabling sharing of data with services that may help consumers understand and match a deal to their needs.

As noted by a 2015 report by the CMA, switching should be free, quick, and data should be accessible and easily reused.<sup>61</sup> The present state of the market shows this is not always the case, and a lack of readily available data has provoked the problems and market failures as outlined. Currently, switching may be hampered due to asymmetric information, behavioural tendencies, network failures and market power. Open Communications aims to enable data portability, remove barriers to market participation, particularly for vulnerable consumers, and drive greater switching.

g) Equity and distributional issues

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<sup>56</sup> Lunn and Lyons (2016) [Consumer switching intentions for telecoms services: evidence from Ireland](#)

<sup>57</sup> SMF (2007) [Concentration not competition: the state of UK consumer markets](#)

<sup>58</sup> Institute of Customer Service (2022) [UK Customer Satisfaction Index](#)

<sup>59</sup> Ofcom (2021) [Comparing customer service: mobile, home broadband and landline](#)

<sup>60</sup> Citizens Advice (2016) [Against the Clock: Why more time isn't the answer for consumers](#)

<sup>61</sup> CMA (2015) [Call for Evidence: Switching Principles](#)

The issues above may be particularly felt by vulnerable groups, who may be more susceptible to low market engagement and loyalty penalties. Citizens Advice finds that vulnerable consumers, typically elderly and low-income households, are especially at risk of paying the loyalty penalty.<sup>62</sup> Vulnerable consumers are found to pay a lower price differential than the average for all out-of-contract customers (£2.30 compared to £5.10 as above)<sup>63</sup>. However they tend to stay out-of-contract for longer (44% have been out-of-contract for at least two years compared to 37% for all customers), a phenomenon observed across sub-sectors, including mobile phones.

Moreover, vulnerable consumers are less likely to engage with the market. Research on customer switching<sup>64</sup> finds that many individuals are unwilling or unable to make calculations to determine their best deal, and often stick with default despite financial costs. Ofcom<sup>65</sup> estimates that addressing the loyalty penalty for vulnerable customers, through pricing commitments and free service upgrades, could benefit out-of-contract vulnerable customers by £70m per year.<sup>66</sup>

Ofcom's Affordability Tracker<sup>67</sup> has shown a steep rise in affordability issues over the past few years, with April 2023 showing 29% of households had had an affordability issue with at least one communications service (including 9% for fixed broadband and 7% for mobile) in the month before they were surveyed. This is in line with recent trends, with telecoms affordability issues roughly doubling since 2021. Lower-income households, and those in receipt of at least one type of benefit, were more likely to have an affordability issue with their fixed broadband service and with all communications services. In fact, households eligible for Social Tariffs\* are **twice as likely to have a telecoms affordability issue** (48% vs 24% for non-eligible) and almost one in five (17%) of those eligible are struggling to afford their broadband

*\* Usually, households in receipt of Universal Credit or Pension Credit, Employment and Support Allowance, Jobseeker's Allowance and Income Support*

### 1.3 Rationale for intervention

Several market failures are believed to exist in the telecoms market, preventing consumers from making optimal choices and enabling businesses to provide the best services and deals to end-users:

- **Information asymmetry:** The first of market failure identified is asymmetric information, whereby buyers and sellers hold different information in an exchange. Customers faced with new complex offerings may find it hard to make informed decisions when they lack clear, complete information on products and their demand. If suppliers hold more complete knowledge of the product or service, they may be incentivised to oversell or charge higher prices than a consumers' true willingness to pay.

In the telecoms market, providers possess data about their customers' demand for telecoms services, not always easily available to consumers. When consumers do have access to their information, they may face barriers to understanding and interpreting the data to use it to their own benefit. In recent years, telecoms businesses have been able to benefit from software advances which make it easier to collate data on their customers' individual consumption behaviours. This data can be used to tailor products and services to specific consumers. Meanwhile, consumers' purchasing decisions are based on incomplete information due to the lack of data availability, and the difficulty in using this data to accurately compare deals and choose optimally. Therefore information asymmetries provide the opportunity for vendors to mis-sell packages at higher prices, constructing offers that consumers will overvalue or mis-interpret the cost, resulting in overselling. As a consequence of asymmetric

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<sup>62</sup>Citizens Advice (2018) [The cost of loyalty: Exploring how long-standing customers pay more for essential services](#)

<sup>63</sup>Ofcom (2021): [Telecoms customers saving millions as Ofcom rules bed in](#)

<sup>64</sup>Department for Business, Innovation and Skills (2015): [Switching principles](#)

<sup>65</sup>Ofcom (2020): [Review of pricing practices in fixed broadband](#)

<sup>66</sup> Citizens Advice (2018) [The cost of loyalty: Exploring how long-standing customers pay more for essential services](#)

<sup>67</sup> Ofcom (2023) [Affordability of communications services](#)

information in the market, and consumers being unable to switch easily to the optimal deal on offer, consumers often end up paying more, reducing consumer surplus.

- **Market power:** The lack of consumer data empowerment within the telecoms market may weaken competition within the market. In markets where data empowerment is increased, entry and expansion by new and existing incumbents is greater. New technology companies providing services using consumer data arise, and small providers find it easier to gain customers with new data services. Consumers are also better informed when choosing a supplier and an offer, and increased switching rates will encourage suppliers to compete for new customers, and reward loyal ones. The most efficient suppliers will be rewarded with engaged consumers joining them. A market with weak competition and less engaged consumers will give existing firms significant market power, enabling them to gain at the expense of consumers and society, through reducing consumer surplus and imposing a deadweight loss to society.
- **Network failure:** Network failure occurs where companies do not cooperate to create and utilise standards. The reluctance may come from one firm being at a disadvantage for following standards while others do not follow suit. In the case of the telecoms sector, cooperation between firms to set standards on sharing data in an accessible format would be in the interest of consumers, whilst also facilitating cross-sector innovation. However, providers may benefit from the status quo or be unable to reach agreement on data standards, reducing the likelihood of creating data portability through industry-led cooperation.
- **Search costs:** There are high search costs associated with navigating the telecoms market, and effectively choosing the optimal deal for consumers. Currently, customers must investigate their own usage requirements over extended periods into the future, and assess a plethora of different products that best fit their needs. This takes place within a complex, dynamic market, where it can be difficult to directly compare products. This, along with other frictions to consumer switching, reduces engagement leaving many to remain on legacy contracts and pay high out-of-contract prices.

In summary, there are several persistent issues in the telecoms sector, particularly in terms of limited consumer engagement, low switching and substantial loyalty penalties. These are resulting in large costs to consumers, particularly vulnerable groups. These problems are unlikely to be resolved by the current market, in which a small number of providers may benefit from unequal access to consumer data, and market complexity limiting the abilities of consumers to effectively navigate and choose optimal products. Without government intervention, it is unlikely industry would cooperate and set data standards independently.

Data portability - improved ongoing access to user data - can help address some of these persistent issues and market failures, by removing barriers to innovation, increasing competition, and enabling consumers to access data on themselves. Data portability is particularly valuable within telecoms. An increasing number of people and businesses shop for telecoms products and services online, creating potential for data to be harnessed to tailor products, improve services and enable comparison.<sup>68</sup> These are all especially valuable in a complex and dynamic telecoms market, where better access and clearer information can remove some of the challenges to market interaction. As such, data mobility has been specifically recommended in broadband and mobile markets, such as by the Competition and Markets Authority (CMA) in 2018.<sup>69</sup> Open Communications alone is unlikely to entirely address all of the issues discussed above, but is likely to help provide the conditions for improved consumer confidence, engagement and outcomes in the market, particularly alongside other actions to improve consumer outcomes in telecoms.

Comparable data portability initiatives provide indications of significant benefits to consumers. Open Banking saw a 10% rise in the level of switching activity in just 2 years<sup>70</sup>, and the Open Banking Implementation Entity<sup>71</sup> (OBIE) estimates aggregate benefits of up to £12bn a year for consumers, and a further £6bn for

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<sup>68</sup> Ofcom (2021) Update on Open Communications: Enabling people to share data with innovative services

<sup>69</sup> CMA (2018) Tackling the loyalty penalty: response to a super complaint made by Citizens Advice

<sup>70</sup> Source: Current Account Switching Service; from Giovannetti and Siciliani (2020) [The Impact of Data Portability on Platform Competition](#)

<sup>71</sup> OBIE representatives (2019) [Consumer Priorities for Open Banking](#)

businesses, with a specific category of “overstretched consumers” saving up to £287 pa, or 2.5% of their annual income.

In the telecoms market, Citizens Advice indicates around half of broadband customers remain with their provider as they trust them, despite four in five paying a loyalty penalty. Capturing just a fraction of these consumers will provide significant benefits. Further evidence indicates that 10% of individuals report that difficulty or complexity in the switching process prevents them from switching.<sup>72</sup> Addressing barriers to switching by enabling easier access to user data, improved switching applications and price comparison will positively impact consumers.

## 2. Policy options

### Description of options considered

This section set out the options considered for Open Communications. As detailed in the Consultation, DSIT intends to proceed with the implementation of a data portability initiative in telecommunications, and the Government is considering different options to implement this.

In developing policy options, DSIT took into account data, evidence and consultation feedback from BEIS and Ofcom. BEIS launched the Smart Data Review in 2018,<sup>73</sup> followed by its consultation in 2019.<sup>74</sup> This consultation proposed the creation of new powers to mandate data portability across regulated and non-regulated sectors, including the development of Open Communications. The Smart Data government response highlighted that there was broad support for the development of data portability and Open Communications, although there were diverse views from the telecoms industry.

Ofcom ran a further consultation examining the costs and benefits of an Open Communication scheme. DSIT are now consulting on the core design elements of a potential scheme, including the types of data that would need to be shared by telecoms providers, data subjects, and how that data should be shared. The current options in the IA are currently a reflection of the potential design options, which will be shaped further once we receive stakeholder feedback.

### 2.1 Desired outcomes

Open Communications aims to improve data portability in the telecoms sector in order to support several key Government objectives by increasing consumer empowerment, tackling loyalty penalties, lowering telecoms bills for consumers whilst maintaining increasing innovation in the telecommunications sector.<sup>75</sup>

In informing design of the scheme, key objectives and outcomes for Open Communication include:

- **Improved outcomes for consumers and business:** the initiative seeks to primarily improve consumer outcomes, by enabling them to easily access deals and packages that best meet their needs, such as speed requirements, price, reliability and data allowances. For now, the consultation suggests only to include home broadband and personal mobile services within the scope of any potential Open Communications. We believe there is sufficient data to suggest that consumers of these services are experiencing difficulty or detriment from their inability to navigate the market. The consultation suggests there may be merit from including business broadband and mobile providers, but requests evidence to support their inclusion, in particular examples of how business may have been detrimentally affected by their inability to effectively, or efficiently navigate the market. We also note that micro-business and sole traders, the least likely to be able to access advice, tend to use home broadband and personal mobile services, so are likely to benefit from Open Communications regardless of whether specific businesses are in scope.

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<sup>72</sup> According to Citizens Advice (2018) ‘10% of respondents with a broadband contract and 8% of those with a mobile handset contract said they had stayed in part because moving was too time-consuming’

<sup>73</sup> BEIS (2018) [Smart Data Review](#)

<sup>74</sup> BEIS (2019) [Consultation: Smart data: putting consumers in control of their data and enabling innovation](#)

<sup>75</sup> Further information on the objectives and benefits of Open Communications can be seen in DSIT (2022) consultation document on Open Communications (cite); Ofcom’s Open Communications consultation (2020) and update (2021); and BEIS Smart Data [Review](#) and consultations

- **Frictionless access to data and sharing:** to ensure consumers and SMEs can easily and effectively benefit from Open Communications, they should be able to easily access and share their data with nominated and authorised third-party services, without undue administrative burdens, barriers or delays.
- **Consumer trust, confidence and scheme transparency:** to ensure that consumer participation in the scheme is risk-free, and that consumers have confidence and trust to engage with the scheme, particularly on how their data is handled, shared and stored. There should also be full transparency in how user data is used, particularly by third-party services, to contribute towards trust and uptake.
- **Strong consumer protection and access to remedies:** users of the initiative should be sufficiently protected and have recourse to remedies when things go wrong, or they feel dissatisfied with the way they have been treated by their telecoms service provider or third party service provider.
- **Provider and TPP accountability, performance and enforcement:** telecoms service providers and third-party services should be accountable for their performance and their compliance on future Open Communications requirements. The most relevant organisation should have an enforcement mechanism in place, to ensure that organisations participating in Open Communications comply with Open Communication rules and standards.

In designing the characteristics of the scheme, we extend the work of Ofcom which has defined the key features of a future Open Communications scheme as:<sup>76</sup>

- **Data about customers would be shared securely and quickly** - Providers would need to share residential and small business customers' data with third parties using secure methods. The process of sharing data with a third party should also be as fast, easy and safe for customers as possible.
- **Users must have control over the data they share** - Users must be able to understand what information they are sharing, with whom they are sharing it, and for what purposes. They must give their consent for their data to be shared.
- **Providers would be required to share data about products with third parties** - Requiring providers to share more data about products could ensure that third parties such as digital comparison tools have access to accurate data about the options available in the market and can make reliable recommendations to users. Our initial view is that data from different providers would need to be standardised sufficiently. However, we are mindful that standardisation could be complex and costly.
- **Any accredited third party, including communications providers, would be able to access customers' data at their request** - Companies that wish to be trusted to access data under Open Communications would need to be accredited. Accreditation would require them to register and follow rules and guidance with respect to, for example, how they obtain a user's consent to share data. An accredited third party could then seek people's consent to access data about them from their provider. People could choose to share their data with another communications provider if it has accreditation.

Other key variables are whether Open Communication mandates industry participation, and the definition of data sharing requirements, which will determine the features, scope and implementation of the scheme. Further details of the options generation and current considerations are discussed in the DSIT Consultation on Open Communication.<sup>77</sup>

## 2.2 Context for options

This capitalises upon primary legislation introduced in Data Protection and Digital Information (No. 2) Bill on Smart Data<sup>78</sup>, which will give ministers delegated powers to mandate data portability in their respective sectors. The precise details of the legal framework are to be later confirmed. Ahead of the legislation being fully in place, DSIT is consulting on the core design elements of what a data portability scheme might look like in telecoms ('Open Communications'), and as such, we have not considered implementation options, including non-regulatory options, at this stage. Namely, the consultation focuses on which telecoms companies should be in scope for data sharing requirements, what types of data should be shared, and the different options on how such data can be shared between telecoms providers, consumers and third-party providers (such as

<sup>76</sup> Ofcom (2020) [Open Communications: Enabling people to share data with innovative services](#)

<sup>77</sup> DSIT (2023) [Open Communications Consultation](#)

<sup>78</sup> DSIT (2023), [Data Protection and Digital Information \(No. 2\) Bill](#)



price comparison websites). Responses to these core elements will then shape further options on how Open Communications can be implemented.

Ofcom's 2020 consultation set out initial thinking on the potential future introduction of a 'data mobility' initiative in the retail telecoms and pay TV markets. Data mobility describes people's ability to choose to share the data that firms hold about them and to derive value from it. For example, they may share data with a digital comparison tool or another provider, which could use it as a basis on which to offer them a better deal, or with a third party that could use it to offer a different service.

This would allow people and small businesses to tell their communications provider to share information about their services and how they use them, easily and securely, with third parties of their choice such as digital comparison tools or other communications providers.

Core features of such an initiative, which we proceed with in the options presented here, are likely to include:

- 1) Consumers share data with any accredited provider
- 2) Any accredited third party could access user data with consent
- 3) Standardisation of data

Responses to the Ofcom consultation<sup>79</sup> provide valuable insights and context to Open Communications:

### **Box 2: Summary of responses to Ofcom Consultation on Open Communications**

Ofcom released their Open Communications consultation in 2020, outlining their view that while competition in the telecoms market ensures many customers are on good deals, with a variety of packages and services available, some customers struggle to navigate this market well enough to access the best deals. Their Update on Open Communications summarises responses to their proposal to increase data portability in the market.

Overall, opinions were mixed over support for an Open Communications scheme and the approach suggested. Some were generally supportive of the scheme, in particular consumer groups, digital comparison tools and BT. Of the former, Which? noted the scheme would aid less confident customers in finding a suitable deal, and Citizens Advice felt implementing data mobility schemes in all regulated sectors would ensure more consistent support for vulnerable consumers.

Digital comparison tools were confident that they could use the data to innovate and agreed with Ofcom's assessment of the challenges consumers face. Market research by Billmonitor found evidence suggesting the majority of people overpay for their mobile service, and WonderBill cited research showing people generally underestimate how much they could save on bills. The benefits to SMEs were also raised by this group, with Billmonitor arguing that data portability could enable a more personalised service to benefit consumers, particularly SMEs.

Lastly, BT agreed with the challenges Ofcom had identified in the consultation and suggested that the scheme might help people optimise decisions based on a variety of metrics alongside speed, price and coverage. However, BT was keen to note that the scheme was not without risks.

In contrast to this, several respondents did not agree with Ofcom's desire for greater data mobility, arguing that the communications market works well for the majority, and would not be a necessary measure to improve consumer engagement. Sky, Virgin Media, Telefónica and the Federations of Communications Services (FCS) suggest the market delivers good outcomes for consumers, with good value deals (proven improvements over time) and high customer satisfaction and engagement. Moreover, Virgin Media argues that the lack of engagement and subsequent high prices paid by consumers may well be a rational choice, given the perceived time and search costs associated with switching to a better deal. Several respondents also believed Ofcom's existing or planned interventions, such as 'end of contract' notifications and requirements to share more information with comparison tools, would address barriers to engagement over time.

A third group of respondents had more mixed views. Some providers did not support an intervention, but were open to an industry-led approach to data mobility, whilst others supported a more targeted intervention. G.Network gave support for Open Communications, but felt other interventions should be considered first, and Vodafone agreed with the principles of the scheme, but believed a voluntary industry-led approach would reap greater rewards. This was supported by Telefónica, who also suggested that a solution should be designed in conjunction with the mobile industry

<sup>79</sup> Ofcom (2020) [Open Communications: Enabling people to share data with innovative services](#)

so that it would be appropriate for customers' needs and preferences. Telefónica further argued that the mobile market's complexity would pose difficulties for third parties to comprehend the full value of deals. Sky also held the view that complexities would make direct comparisons harder, especially given the wide range of metrics and non-price characteristics relevant to consumer choice. Three meanwhile posed a more targeted approach focusing on increasing engagement among consumer groups with low switching rates, such as those over 55. Finally, some respondents expressed doubt over the quality of evidence in the consultation document to justify the scheme, whilst others felt there is already enough data available to consumers and third party providers.

### **Costs and Benefits**

In terms of the costs and benefits outlined in Ofcom's consultation document, many responses from consumer groups and third parties broadly agreed with the benefits Ofcom highlighted. Uswitch and Which? agreed the scheme would reduce time and effort spent searching for deals, and both noted it would reduce market complexity. Which? in particular felt that Open Communications could help customers reluctant to engage for fear of making the wrong decision when selecting a new package, and overcome the belief that changing broadband packages could result in higher costs than anticipated. Among other responses, benefits such as increased trust, transparency, innovation and information were suggested, with particular emphasis on the benefits to vulnerable consumers.

However there were some respondents disagreeing with the proposed benefits. Virgin Media and TalkTalk disagreed with Ofcom's assertion that Open Communications would improve consumer knowledge, with the former party suggesting that despite the possibility that consumers may not understand their existing services or needs, this does not imply consumers would make the effort to use the Open Communications scheme. Consumers may rationally decide not to make the effort to switch, being content with adequate service. They also identified that consumers learn their patterns of consumption over time, which may increase their confidence in the market. Other respondents highlighted the risk that third party recommendations may not be in the best interest of consumers, and unengaged consumers, likely including the vulnerable, increase their risk of exploitation or data mis-use of their data, or are unlikely to want to share data with third parties in the first place. Finally, several respondents highlighted that the benefits outlined were incremental to benefits arising from prior interventions, and may be duplicative requirements. Sky argues the information may overload consumers, even proving to be a disbenefit.

Ofcom's consultation believed Open Communications to be a significant cost to providers, outlining several categories of costs of setup and service. Many agreed with those proposed in the consultation, and some identified further costs, with BT proposing seven further categories. Several providers were concerned about a disproportionate cost burden on smaller providers, due to the complexity of the requirements.

The scale of these costs was also somewhat varied within the responses, with Three claiming the data in scope of the scheme would have the largest bearing on costs, while Telefónica considered it to be the complexity of the solution (i.e. additional judgement and processing needed among subjectively-measured data vs a specific, factual, measurable approach). In contrast, Raidam suggested that such costs would be driven by the current state of infrastructure, and therefore should not be large as companies are already investing in digital access for their customers. BT and Telefónica believed the cost burden to be increased significantly if SMEs were to be included in the scope of Open Communication, due to the complexity of facilitating meaningful comparisons across a variety of add-ons and bespoke business solutions, of which prices are often agreed by contract negotiation. IPSA confirmed this, stating that the bundled nature of business products would prove difficult to compare.

In terms of estimating costs, most respondents said it was too early, though BT expected costs of implementation and running to be between £40 and £100 million for the first 3 years. Others drew comparisons to Open Banking, debating the usefulness of using costs to estimate that of Open Communications.

## **2.3 Options considered**

### **Option 0: Do nothing**

Under this option, the Government would not use any new Smart Data powers. As typical within appraisal, this do nothing option is considered to be 'Business as Usual' and a continuation of ongoing trends, current and planned legislation, and relevant initiatives.

### ***Development of a Industry-led Voluntary Scheme***

Without any action taken on Smart Data powers, it would be left to industry participants to consider and decide whether to introduce customer data sharing arrangements on a voluntary basis. This has been our first consideration when analysing options for implementing an Open Communications scheme in the telecoms sector. Following this analysis and review, we deem it reasonably unlikely that without specific Government intervention that a voluntary and comprehensive industry scheme would be implemented, or if one did progress, it would unlikely meet our key objectives and outcomes.

The key reasons for this assessment and our views on the possibility of a voluntary scheme emerging include:

- No voluntary scheme has been forthcoming to date - In June 2019, in response to BEIS' consultation to the Smart Data Review consultation a number of communication providers noted that industry should be left to develop voluntary schemes, without the use of legislation. It has been 4 years since industry made these suggestions, but no voluntary scheme has yet been developed.
- An industry voluntary scheme is unlikely to be comprehensive - under a voluntary scheme, it is likely that only some parts of industry would agree to sign up to a voluntary scheme. As such, there is likely to be patchy coverage of data portability for consumers - as it would depend on which provider they are with.
- There is, in our view, little incentive for data holders to readily share data with third parties without intervention - which is likely one of the key reasons a voluntary scheme has not been forthcoming.

Furthermore, to allow data portability to take place across industry properly, common rules, standards and technical specifications need to be agreed upon - this is unlikely to happen due to potential diverse views across the sector, difficulties in coordination and finding consensus, and large transaction costs or administrative challenges to implementing such a scheme without top-down organisation. Additionally, the development of a voluntary approach, without any Government intervention could result in a scheme that is not interoperable with other proposed or future sectoral Smart Data schemes.

### **Other current interventions**

The current mandatory data sharing requirements on business are enshrined by the General Data Protection Regulation (GDPR). Primarily, this is covered by consumer rights to data, which aims to rectify consumer harm and poor market competition. Under this right, firms are compelled to provide personal data in an electronically readable format. However, data requested is often not provided to common standards, in a secure, timely or ongoing way or with appropriate protections for consumers.<sup>80</sup>

A lack of common standards mean that customers have to follow complicated processes to access their data, expend time interpreting what this data means and working out if there are better deals elsewhere. This means the scope for effective comparison is poor, with the lack of standardisation in turn limiting the creation of innovative new services to help empower customers.

Even under a Business as Usual scenario, there are initiatives in place from the government, Ofcom, businesses and advocacy groups. Action to improve consumer engagement and switching in telecoms includes:

- **End-of-contract notification requirements:** in February 2020, Ofcom brought in new rules requiring communication providers to send their customers a notification when nearing the end of their contracts.<sup>81</sup>
- **New Ofcom consumer protection rules - the European Electronic Communications Code (EECC):** from December 2021, greater protections will come into effect in relation to bundled services, a ban on handset locking, and from June 2022, new provisions will come into effect offering stronger contract rights.<sup>82</sup>
- **Broadband Gaining Provider-Led Switching ('One Touch Switch' Process):** from April 2023, a customer's new broadband provider was required to lead the switching process, regardless of the underlying network or technology.<sup>83</sup> However, operators have failed to implement this as of yet, leading to an investigation by Ofcom<sup>84</sup>
- **Telecoms Consumer Advocacy reforms:** In order to improve the consumer voice in telecoms, the Government launched a consultation in July 2019, proposing the appointment of Citizens Advice as the

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<sup>80</sup> Wong & Henderson (2018): "How Portable is Portable? Exercising the GDPR's Right to Data Portability" Study;

Jeni Tennison (December '17): "Data portability" Blog,

ODI (February '18): "Will GDPR and data portability support innovation?"

Blog, Jason Furman & Digital Competition Expert Panel (March '19): "Unlocking digital competition" Report

<sup>81</sup> Ofcom (May 2019) [Statement on end-of-contract notifications and annual best tariff information](#)

<sup>82</sup> Ofcom (November 2020) [Statement: Implementation of the new European Electronic Communications Code](#)

<sup>83</sup> Ofcom (September 2021) [Statement and consultation: Quick, easy and reliable switching](#)

<sup>84</sup> Ofcom (April 2023) [Investigating broadband providers for failing to implement simpler switching](#)



new telecoms advocate in England and Wales, and the General Consumer Council for Northern Ireland for NI consumers.<sup>85</sup> The Government aims to publish a response in due course.

### **Option 1: Non-regulatory Implementation**

Another option we have assessed is the viability of the Government pursuing the development of an Open Communications scheme with industry and third-party providers without the use of legislation - by working with industry to get a unified and comprehensive scheme in place.

In summary, as with the development of a voluntary option, we are of the view that the pursuit of a non-regulatory Open Communications scheme is unlikely to meet our key objectives and desired outcomes, and we question whether without legislation industry would be willing to create a scheme. We have taken the following factors into account in reaching our view:

- As with the voluntary approach above, in reality there is very little incentive for data holders to make data accessible and shareable. Each telecoms company is naturally positioned to retain their customers; as such any pro-competitive measure is likely to be resisted by industry in the first instance. This means that they are very likely to resist any non-regulatory steps to implement Open Communications.
- Limited options with a non-regulatory approach - legislation is needed for the wider ecosystem (as legislative changes are likely to be needed for matters relating to enforcement)
- It is very unlikely that all the major telecoms companies will sign up to a non-regulatory scheme, creating an unfair level of data access for consumers, which would be dependent on which provider they are with.
- Additionally - there could be difficulty in getting industry to share certain types of data - a non regulatory approach could only see industry agreeing to make available a very small set of data, which would not help consumers fully understand the services they are on, nor allow third-party providers to yield meaningful recommendations on the offers available in the market.

### **Option 2: Partial implementation of Open Communications**

Under this option, new Smart Data powers would be used by DSIT to require telecoms companies to provide all relevant customer data downloadable by their customers on request. This could potentially be in the format of CSV files (such as a list of the customer's data in a spreadsheet), which the customer would be able to share with third-party providers ('TPP', such as price comparison websites).

TPPs would be able to use that data to give the customer a one-time recommendation on the deals available in the market that would best suit the customer's preferences. Such TPPs would need to be certified to receive and use such data.

This option would include the use of new Smart Data powers to develop an interim, light-touch implementation of a data portability scheme in the telecoms sector. This option would be designed in the following way:

- Major telecoms companies would be required to make customer data available for download by the customer, such as in CSV files. This would need to be available at the request of the customer.
- Such data could include package data, i.e. what services the customer has taken-up, the length of the contract (including contract end date) and any relevant usage data (such as how much data the customer uses on a monthly basis).
- TPPs would be able to choose to participate in the scheme, and be certified to be able to receive such customer data. By doing so, TPPs would be able to use the CSV files to generate recommendations to the customer on deals available in the market.
- Ofcom (or another similar body) could be appointed to run this scheme. Its responsibilities would include ensuring that telecoms companies are following the requirements of this scheme (such as ensuring customer data is available for download) and running a TPP certification programme, to ensure that only such certified TPPs can take part in this scheme).

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<sup>85</sup> DCMS (2019) [Consultation on Reforming Consumer Advocacy in Telecoms](#)

### **Option 3: Full implementation of Open Communications**

Under this option, the Government would use the prospective Smart Data in full powers to develop a comprehensive data portability scheme in telecoms. As detailed in the BEIS Impact Assessment,<sup>86</sup> the key features of a Smart Data scheme, beyond conventional data portability and which would be taken forward in telecoms, include:

- Provide timely data access to third party providers (TPPs, e.g. price comparison engine) following a request from a consumer, rather than the 30 days permitted in the right to data portability in data protection rules.
- Share data securely via Application Programming Interfaces (APIs), the standards which would need to be developed for the telecoms sector.
- Provide, subject to the customer’s consent and when required, ongoing access to data between data holders and TPPs rather than a one-off transfer.
- Adhere to common or consistent technical standards or guidelines, data formats, and definitions to ensure interoperability and to minimise barriers for TPPs.
- Provide product and performance data, such as tariffs or geographical availability of services, in addition to customer data to enable innovation.
- Sharing of customer data, upon request, with authorised TPPs in open data formats. There would be a requirement for telecoms companies to make available the sharing of product data in open formats.
- Government would nominate a separate body to administer Open Communications, such as working with industry to develop data sharing standards (such as APIs), and monitoring and enforcing compliance of rules. The body would require industry funding, made of potential levies and charges.

Both Options 2 and 3 are extensions beyond the current data portability rights in the GDPR. Under both, rights of access to personal data would be expanded to include current non-personal (effectively proprietary) data, such as on transactions, and higher common standards for this data would be set. The core difference between Options 2 and 3 is in the ongoing access of consumer data and data sharing standards to third parties and applications, which go much further in Option 3.

**Table 1: Comparison table of options**

**Options 0 and 1**

	<b>Option 0: Business as Usual</b>	<b>Option 1: Non-regulatory implementation</b>
<b><i>Requirements on business</i></b>	GDPR requires companies to make personal data available within 30 days.	Government would ask industry to make specified customer data available for download (which go beyond GDPR requirements) within a short, reasonable period of time.
<b><i>Data access</i></b>	Data access would be limited to personal data, as defined by the GDPR.	Consumers would potentially be able to gain access to their data. Government would ask industry to make the following data available, such as price info (such as cost of services), contract details (such as contract start and end date), usage details, and the types of services that the consumer has in their contract.
<b><i>Data standards</i></b>	No uniform data standards across industries.	Government would ask telecoms companies and TPPs to work together to develop standards for data formats.
<b><i>Implementation and management</i></b>	No further implementation is required.  In terms of a voluntary data portability	Government would ask industry to implement the data sharing infrastructure with TPPs, and voluntarily be subject to an administrative body’s

<sup>86</sup> BEIS (2020) [Regulatory Powers for Smart Data Initiatives](#) Regulatory Impact Assessment

	scheme being developed by industry, this is unlikely to take place without government and regulator intervention.	oversight.
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**Options 2 and 3**

	<b>Option 2: Partial Open Communications</b>	<b>Option 3: Full Open Communications</b>
<b><i>Requirements on business</i></b>	To make specified customer data available for download (which go beyond GDPR requirements) within a short, reasonable period of time. This is likely to be in spreadsheet formats (such as CSV) which can then be shared and uploaded with third-party services of their choosing (such as price comparison websites).	Requirement for specified telecoms companies to participate in a telecoms data portability initiative. This will require the development of data sharing APIs, and the availability of customer data (to be specified further following consultation) to third-party providers at the request of the customer.
<b><i>Data access</i></b>	Consumers would potentially be able to gain access to their data. The types of data consumers can access will be subject to consultation, but could include price info (such as cost of services), contract details (such as contract start and end date), usage details, and the types of services that the consumer has in their contract.	The data access would be similar to option 2, however, the consumer would be able to request that the telecoms provider shares that data with an authorised third-party service, through a seamless API infrastructure.  <b>The key difference between Options 2 and 3 is likely to be requirements on data sharing methods (CSV vs development and APIs).</b>
<b><i>Data standards</i></b>	It is expected that telecoms companies and TPPs would work together to develop standards for data formats, potentially guided by the government, Ofcom (or the body appointed for managing the scheme).	Standards are to be confirmed, but these would likely be developed by consensus with a consortium comprising the telecoms industry, third-party providers, data experts and the ICO, Ofcom and potentially DSIT.
<b><i>Implementation and management</i></b>	Following BEIS' introduction of new smart data powers, DSIT would likely need to put in place new regulations to mandate industry participation in Open Communications. Regulations would specify the data types, and how data is to be shared. There might be a need for a light-touch involvement by government/regulators to manage the scheme.	Following DSIT introduction of new smart data powers, DSIT would put in place new regulations to mandate industry participation in Open Communications - which would set out data that needs to be shared and how. A body would potentially be appointed to manage the scheme. This is subject to how the Open Comms scheme is designed, following consultation of the core elements.

At this stage, the options are indicative and there remain a number of details to be determined. At the consultation stage, there are key core questions on the main elements of the Open Communications scheme, including scope, data types and data sharing methods which the government is seeking input on.

It should be noted that the analysis of potential costs and benefits is focused on options 2 and 3, a partial and comprehensive implementation of Open Communications, as these are considered the two most appropriate and viable options to analyse relative to business as usual, as no voluntary scheme (option 1) has yet been proposed. Assuming all firms cooperated, the costs and benefits of option 1 could be broadly similar to option 3, though this would depend on the nature of the scheme proposed. However, without details on the proposal of a voluntary scheme, we cannot project and analyse impacts of this option at this stage.

### **3. Cost benefit analysis**

In this section we identify the main expected costs and benefits of the options, including potential administrative or one-off impacts. While precise monetised impacts are difficult to estimate at this stage, in this consultation stage Impact Assessment we attempt to identify and summarise the different impacts of the data portability initiatives, and indicate likely magnitude of impacts.

The precise impact of Open Communications is by nature uncertain: benefits are contingent on the extent to which third parties use consumer data, and the extent to which consumer behaviour responds to the scheme. There is also uncertainty over the precise implementation of the options, for example the scale and exact mechanism for funding. We are seeking input at consultation on these different options.

This uncertainty means we opt for a primarily qualitative and indicative quantitative approach at this stage, which identifies impacts and their potential magnitude. We do not offer full summary measures, such as the net present social value of each of the options, as monetised summary measures are unable to appropriately compare options at this stage.

These are presented as initial estimates. While we are not seeking direct input on these estimates at this consultation, there will be an opportunity to respond, comment and add evidence to this analysis at a later consultation. The figures at this stage should be treated as indicative of a likely Open Communications scheme, based on similar and related policies.

The main affected groups of secondary Open Communications legislations are expected to be:

- a) Current suppliers of telecoms services: costs of understanding, implementation, and ongoing compliance with regulation. The business base within telecoms is around 8,500 firms in total<sup>87</sup> around 250 of which are medium to large-sized businesses which are likely to be the main affected firms.
- b) Third party platforms or 'TPPs': benefits from increased access to data; costs in understanding relevant regulation and application fees for ongoing accreditation)
- c) Government and the regulator, Ofcom: in terms of costs to fund implementation bodies and enforcement.
- d) Consumers: benefits in terms of improved information, increased switching, better decision making, time and money saving in telecoms.

We identify a number of costs and benefits, based on existing research and consultation with affected groups. In its Open Communications consultation,<sup>88</sup> Ofcom identifies a number of potential benefits for both residential and business consumers, including:

1. Reducing the time and effort needed to search for a new deal [for telecoms customers];
2. Increasing the benefits for customers of searching the market and finding a deal better suited to their needs;
3. Enabling innovation and the introduction of new services;
4. Enabling services designed to benefit people in vulnerable circumstances, for example people in financial difficulties;
5. More effective competition that could lead to better outcomes for people and businesses.

We agree with this identification of the key impacts of a likely Open Communications scheme, and expand on these impacts at a more granular level. The table below summarises, at a high level, the range of impacts that can be expected to come from Option 3 as the full implementation of a data portability. Most of these impacts are similarly expected from Options 1 and 2, although mostly to a lower magnitude, as discussed in the sections below.

It is not possible to estimate the overall NPV or EANDCB of an Open Communications scheme at this stage, before the scope, data to be included and sharing approach have been established, but we include indicative annual costs in tables 2a and 2b below based on other related policies, with further detail in the individual sections below. The coloured shading indicates how each of the impacts has been assessed with the Impact Assessment, with most estimates indicative rather than monetised with confidence at this stage. Most of the impacts in the table below are common across most variations in the reform, although they may vary in scale; the differences are outlined further below.

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<sup>87</sup> As defined by Standard Industry Classification (SIC) codes for telecommunications, 61. From UK Business Counts: enterprises by industry and employment size band

<sup>88</sup> Ofcom (2020) [Open Communications: Enabling people to share data with innovative services](#)

**Table 2a: costs and benefits to business**

*Green = illustrative monetisation Pink = non-monetised White = excluded*

Type	Group	<u>Costs (indicative, undiscounted, industry-wide)</u>	<u>Indicative Benefits</u>
Direct	Businesses	Setup and familiarisation (£0.1m-£2m)	
		Ongoing compliance, gathering data; and maintenance (£4m-£163m a year)	
		Levy on industry for implementation entities <sup>89</sup>	
Indirect	Businesses	Third parties - Accreditation fees <sup>90</sup>	Third party producers (TPPs) productivity
		Third parties - Setup and familiarisation <sup>77</sup>	Businesses: New services/sales from increased access to data
		Third parties - Processing and use of data <sup>77</sup>	Increased competition - reduced barriers to entry and new business formation
			Increased transparency and loyalty
			SME (end-users) from increased switching and finding better deals

**Table 2b: costs and benefits to other affected groups**

*Blue = monetised Green = illustrative monetisation Pink = non-monetised*

	<u>Indicative Costs (undiscounted)</u>	<u>Indicative benefits (undiscounted)</u>
Public sector	Funding set up (up to £32m)	Easier access to better quality data
	Ongoing operational costs / resource of implementation bodies and enforcement (up to £32m a year)	Reduced regulatory burden through competition and innovation
Consumers	Higher prices: Costs (potentially) passed through by suppliers. Although we should be better placed to consider this in the next stage of consultation, it is important to consider pass-through costs watering down, or potentially outweighing the savings from reduced loyalty penalties.	Cost savings (increased switching rates and avoidance of loyalty penalties) (£14m-£35m a year)
		Time savings through reduced search costs (£11m-£30m a year)
		Consumption Benefits (informed decision making, different consumption choices, increased utility)
		Equity and services for vulnerable individuals
		Reduction in fraud; greater data security
		Potential competition benefits lowering costs / improving services for those who don't switch

<sup>89</sup> Levy will be excluded from Business Impact Target and EANDCB

<sup>90</sup> These third party costs are considered indirect and voluntary, only incurred if firms choose to opt into Open Communications. The decision to opt in is assumed only to occur where benefits are equal to or greater than costs.

**Table 3: Logic model of the intervention and outcomes**

Inputs	Activities	Output	Outcomes	Impact/strategic objectives
New legislative powers from DSIT and DBT on smart data	Regulation to mandate portability, to provide telecoms user data on request	New legislation	More accessible data: better consumer decision making	Increased consumer demand access to data and new services
DSIT resource	Standards for the ongoing, trusted sharing of data with TPPs and apps	New clients from increased switching, investing in marketing practises	New innovative services - switching, price comparison - allow customers to compare deals	Increased data availability and accuracy for public sector and academic research
Funding and investment	Industry levy and accreditation fees; implementation body	Standards and requirements on data portability	Greater transparency on user data held by companies; Increased security/reduced fraud	Increased competition and innovation in telecoms
Regulatory design of scheme		Consistent standards for the format and readability of consumer data	Third-party revenue and productivity	Increased switching; reduced loyalty penalty: increased disposable income

## Direct costs and benefits to business calculations

Here we outline the expected direct impacts to business for the preferred option, a comprehensive Open Communications data portability scheme. This section details the impacts and analysis in line with the Business Impact Target (BIT) methodology, covering expected direct impacts. In line with guidance, 'business' here refers to business and voluntary & community bodies (VCBs).

In its primary role as a comprehensive data portability scheme, Open Communications will improve consumers' access to data held by businesses on their individual telecoms consumption patterns. Improving access to data will reduce the information asymmetries which feature in this market, whereby businesses know more about consumers' demand for telecoms products and services than the consumers themselves. Whilst this will benefit consumers, changing the existing standards under business as usual will impose some costs to businesses.

We present and estimate impacts in as much detail as possible given available evidence and detail on the options. There remains uncertainty over the exact implementation of options and the size of impacts. We therefore aim to describe all expected impacts, where possible adding monetised estimates of these costs and benefits. Further consultations with business will be required to test and improve accuracy of cost-benefits analysis, for which we intend the below identification of types of impact as a starting point. At a later consultation, we will seek further clarification on this analysis and impact estimation.

### Summary of impacts

Summarising the below direct impacts, it is likely that Open Communications will result in some additional regulatory compliance for businesses, in terms of familiarisation, ongoing compliance, data access and adherence to standards, and in funding for implementation. Current best estimates indicate that these could pose manageable burdens for businesses.

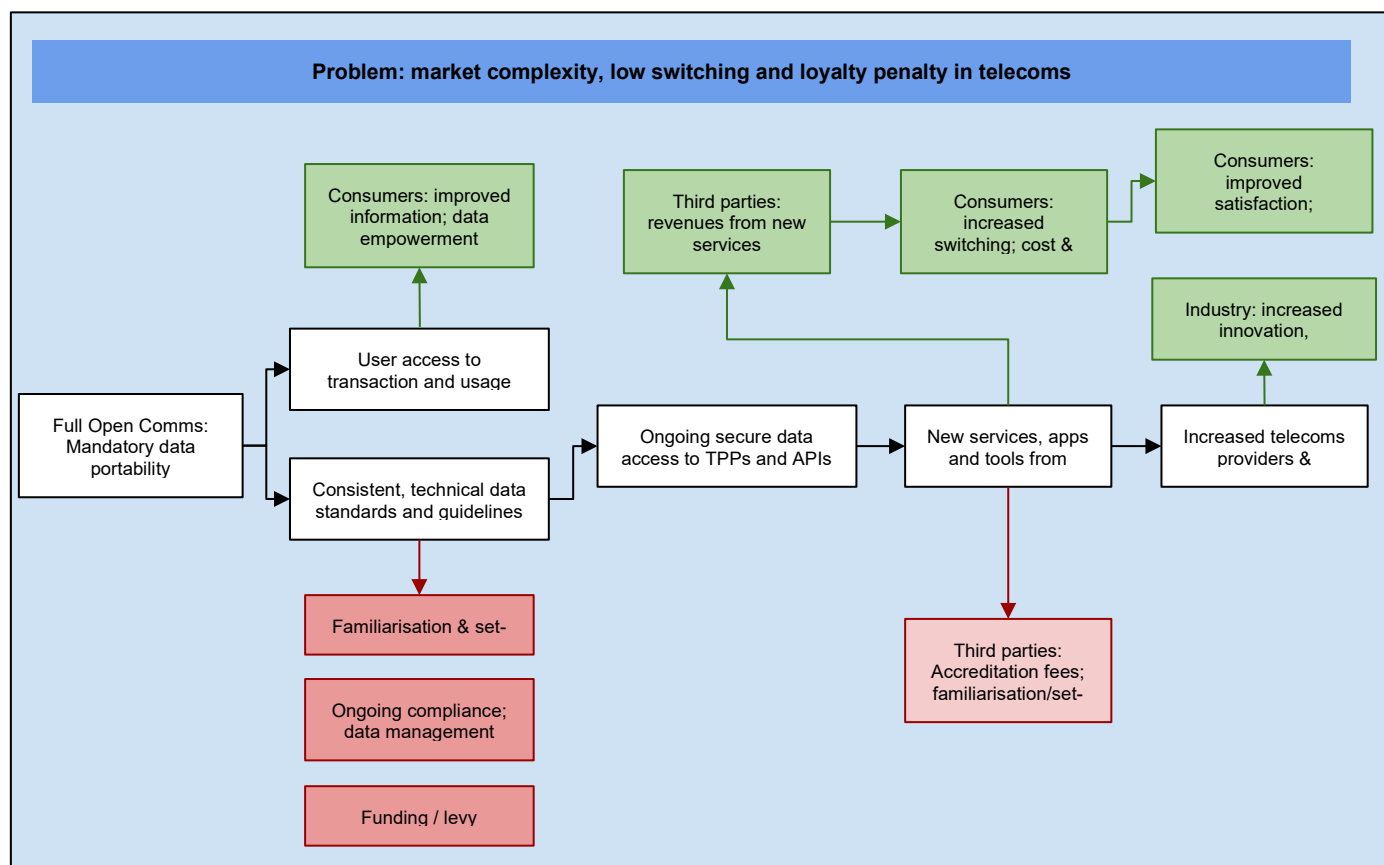
The section below details wide-ranging estimates of costs, and given the limited evidence we do not present a point estimate of costs, but instead summarise and critically evaluate the available evidence. One-off familiarisation costs are likely to sit between £74,000 and £2.1 million across industry in the first year, with the upper estimate being proxied from the Pension Schemes Bill Impact Assessment, an industry which is significantly larger than Telecoms. Ongoing costs can first be proxied from the yearly costs of GDPR, which sum to around £50,000 per business or around £4.2 million for the industry however this figure excludes key activities such as gathering data, developing APIs and service management. The Pension Schemes Bill predicts a cost to industry of £25-£163 million per year, though this is a larger industry as mentioned above; this is used as the upper bound. It is likely that the true cost of Open Communications will sit somewhere between these estimates, however given the magnitude of the range among the cost evidence available, more data is needed to accurately forecast the costs faced. As such, we aim to obtain this information at a later consultation, once the scope, types of data to be included and sharing approach have been established.

Further analysis and sensitivity should be conducted at Final Stage of appraisal; nonetheless, we deem it unlikely that the regulation will pose unmanageable costs to businesses. Furthermore, an effective data portability scheme is likely to have beneficial implications across the telecoms industry, for businesses and consumers. The direct benefits of Open Communications are expected to be new services and increased revenue/productivity of third party providers, and improved consumer outcomes through greater market engagement, information, switching and reduced loyalty penalties harming vulnerable consumers.

Although there are direct costs to business of this regulation, there are also significant benefits to other parties. Under option 3, the comprehensive Open Communications scheme, we expect to see a rise in consumers switching to more cost effective plans. An increase in switching of between 2% and 5% would result in consumer benefits of between £117.6 million and £294.0 million over the appraisal period. These benefits are expected to be greater under Option 3 than Option 2.

While there is significant uncertainty in both costs and benefits at this stage, it is expected that the proposed schemes are very likely to generate an overall net benefit to society. Due to the current magnitude and persistence of the loyalty penalty and negative consumer experiences in telecoms, Open Communication is expected to generate large consumer benefits.

**Figure 8: key costs and benefits of Option 3 - Comprehensive Open Communications**



Below, we detail the expected direct impacts to businesses, Third Party Platforms (TPPs), consumers, and the public sector. The below impacts are considered primarily arising from the implementation of the preferred Option 3 but we discuss key differences between impacts and estimates between options where possible.

### Direct impacts to incumbent telecoms business

The primary costs of Open Communications are likely to be the costs of understanding, implementing and complying upon telecommunications businesses with the initiative.

#### 1) Cost to business: Setup and familiarisation

Suppliers will face familiarisation costs, associated with understanding the new data portability regulation. Firms will need to identify which aspects of the scheme apply to them, what changes need to be made to data sharing, and share this information among relevant colleagues through training, reading or new policies. Such costs can be calculated by estimating the number of hours and employees needed to familiarise themselves with the legislation, in line with the Standard Cost modelling approach.<sup>91</sup> Further costs will arise through the implementation of necessary requirements, including new staff to manage and run the increased workload, the setting up of a database to store data, and acquiring software to process the necessary data. Monetising these costs presents challenges at this stage, but indicative evidence can be gathered from key pieces of analysis (see Box 2 below), and responses to Ofcom's 2020 Open Communications Consultation enables us to provide some estimates.<sup>92</sup>

On familiarisation costs, the Pension Schemes Bill Impact Assessment<sup>93</sup> (detailed below) estimates the new pension programme at £2.1 million<sup>94</sup> as an aggregate familiarisation cost to the pensions industry. More granular evidence of the unit costs underpinning such estimates are needed to ensure a detailed analysis of costs. This indicative estimate is expected to be a high proxy for the familiarisation impacts, given the scheme required familiarisation for 5,500 participants, a much greater number than Open Comms.

<sup>91</sup> OECD [International Standard Cost Model Manual: Measuring and reducing administrative burdens for businesses](#)

<sup>92</sup> Ofcom (2021) Update on Open Communications

<sup>93</sup> Department for Work and Pensions (2019) [Pension Schemes Bill 2019 Impact Assessment](#)

<sup>94</sup> In 2019 prices, taken from the summary table in BEIS (2020): [Regulatory Powers for Smart Data Initiatives](#)



We conduct a simple modelling illustration to project a potential range of familiarisation costs, based on available assumption and evidence:

- **Primary/high exposure business base affected:** the Government consultation proposes all telecoms providers that provide residential and personal mobile services may be in scope of Open Communications data sharing requirements. We project a high exposure business base of around 60 firms which will be primarily affected by regulation, covering around 20 internet service providers,<sup>95</sup> 4 Mobile Network Operators, and 35 mobile network virtual operators.<sup>96</sup>
- **Secondary/low exposure business base affected:** It is also possible that other telecoms businesses will need to briefly familiarise themselves with the new legislation. We consider the likely range of this between 240 businesses (those with powers under the Electronic Communications Code)<sup>97</sup> around 950 (all UK telecoms firms with 10 or more employees).<sup>98</sup>
- **Hourly wage for affected workers:** The median hourly wage for information and communication staff is £20.90; and £26.22 for legal and accounting activities (80th percentile used as the highest estimate available and reasonable assumption).<sup>99</sup> This is increased by 22% to account for non-wage staff costs, in line with appraisal guidance, to £25.50 and £31.99 respectively.
- **Familiarisation - primary:** We propose it may take primary affected business five employees 6 hours to familiarise themselves with the legislation, as well as 2 hours for one legal professional.<sup>100</sup> We take the 6 hours as a potential estimate for the total estimated reading time for the ICO's 2021 data sharing code of practice Impact Assessment.<sup>101</sup>
- **Time taken - secondary:** Using estimates from the European Electronic Communications Code (EECC) DMA from 2020<sup>102</sup>, one employee will need to spend thirty minutes scanning legislation. We increase this to one hour per staff member due to potential complexity of the data portability requirements
- **Other familiarisation costs:** may include training, design of new materials or literature, which we note qualitatively at this stage.

**Table 4: Projected familiarisation costs by business type**

	Businesses	Cost per business	Total
High exposure	60	£829	£49,700
Low exposure	950	£26	£24,200

We therefore project total familiarisation costs of £74,000 as a one-off impact in the first year of implementation.<sup>103</sup> This estimate is not intended as a precise estimate, but rather to enable response and discussion on different perspectives on the accuracy of such projections for familiarisation. A range of well-informed responses on this modelling should help to improve later analysis of familiarisation costs.

It is possible that such costs may be larger in the case of Open Communications. Depending on the complexity and requirements of the final implementation, there may be larger familiarisation time costs than those above for businesses to incur. We suggest the above estimates for Option 3. At a later consultation, we will seek input on these assumptions, and the other indicative ranges of familiarisation costs.

## 2) Cost to business: Ongoing compliance

Data portability in telecoms will place additional requirements on businesses. The likely requirements of Option 3 will be suppliers organising user data, providing data on request to TPPs following requests from consumers, ensuring this data is shared securely and that they adhere to common or consistent technical

<sup>95</sup> uSwitch (2022) Broadband deals by provider

<sup>96</sup> uSwitch (2022) MVNOs: a guide to virtual networks

<sup>97</sup> Ofcom (2022) Register of persons with powers under the Electronic Communications Code

<sup>98</sup> Nomis (2022) UK Business Counts - enterprises by industry and employment size band

<sup>99</sup> ONS (2021) ONS Annual Survey of Hours and Earning Earnings and hours worked, age group by industry by two-digit SIC

<sup>100</sup> As half of the estimated legal time-costs for a more complex data reform, in DCMS (2021) [Data: a new direction Analysis of expected impact](#)

<sup>101</sup> ICO (2021) [Impact Assessment: Data Sharing Code](#)

<sup>102</sup> DCMS (2020) De Minimis Assessment: European Electronic Communications Code (EECC)

<sup>103</sup> Numbers do not add up due to rounding

standards; ensuring effective mechanisms for consumer consent and access to data. Broadly, such activities have been identified by Ofcom as:<sup>104</sup>

- A. IT maintenance and running costs
- B. Database consolidation
- C. API development
- D. Authentication
- E. Secure data-transfer

The setup of IT and organisational changes needed to enable the gathering and sharing of consumer data will also impose a cost on suppliers. In addition to gathering and sharing the data, such changes include ongoing costs of compliance, service management and development, legal and security costs, and service support costs.<sup>105</sup>

An impact analysis on data reform<sup>106</sup> provides some cost estimates for key compliance requirements and activities resulting from the current UK GDPR/DPA requirements. Given Open Communications would involve a similar process of providing data at the request of consumers, we can review some of their estimates for ongoing costs. Identified costs include:

- **Seeking legal advice:** Businesses may require external legal advice to ensure compliance with regulation
- **Keeping records of data processing activities:** maintaining record of where data is used and stored.
- **Database consolidation and processing:** Internal staff time is needed to process the data, ensure it is securely stored and prepare this for others.
- **Responding to data requests:** this involves the cost of collating an individual's data at their request and providing this in a secure format.

Such costs amount to £50,600 per business for highly exposed businesses, and £1,200 for smaller firms with low exposure, though further evidence is needed to cost the gathering and formatting of data, service management and development, API development and authentication, which are likely to be significant.

**Table 5: Projected compliance costs by business type**

	Businesses	Cost per business	Total
High exposure	60	£50,600	£3,035,100
Low exposure	950	£1,200	£1,126,700

In terms of available evidence of data portability scheme assessments, the Pension Schemes Bill Impact Assessment estimates compliance costs to industry to be between £245 million - £1,480 million across the first 10 years.<sup>107</sup> In their response to Ofcom's 2020 consultation paper<sup>108</sup>, BT<sup>109</sup> incorporates the cost of database consolidation and standardising metrics into their overall estimation of generating and sharing data - £20-40 million across the first 3 years<sup>110</sup>. Other providers argued it was too early to provide cost estimates without knowing how the regime might look. BT incorporates its estimation of IT services and running costs into their £20-40 million figure, however they also highlight a series of extra costs (those not identified in the Ofcom Consultation).<sup>111</sup> Table 6 shows the costs identified by Ofcom, and the further costs noted by BT. These include security and legal costs and service support costs, as well data quality and testing, service provision, service management and development and reliability requirements. BT estimates these additional cost categories to total in the first 3 years between £20-60 million, though provides no further breakdown of costs.

<sup>104</sup> Ofcom (2020) [Update on Open Communications](#)

<sup>105</sup> Outlined in Ofcom's 2020 [Update on Open Communications](#)

<sup>106</sup> DCMS (2021) [Data: a new direction Analysis of expected impact](#)

<sup>107</sup> Summarised in BEIS (2020): Regulatory Powers for Smart Data Initiatives

<sup>108</sup> Ofcom (2020) [Open Communications Consultation \(Table 6\)](#)

<sup>109</sup> Ofcom (2021) [BT Consultation Response](#)

<sup>110</sup> BT's response was submitted in 2021 and incorporates a wide ranging estimate, so for simplicity we do not deflate to 2019 prices.

<sup>111</sup> Ofcom (2020) identify a series of costs in Table 1 of their [Update on Open Communications](#)

**Table 6: Costs identified by Ofcom, and further costs identified by BT**

Costs identified by Ofcom	Costs identified by BT
IT maintenance and running costs	Data development
End-to-end secure data transfer	Data quality testing and management
Authentication	Legal and security costs
API development	Putting services into production
Standardising metrics	Ongoing service management and development
Database consolidation	Service support costs
	Reliability requirements

There are few comparable estimates on the ongoing compliance costs arising from Open Banking. While large amounts have been invested by industry into the scheme infrastructure - totalling an estimated £1.5 billion according to UK Finance - this represents a large upfront investment into the implementation body of the scheme, rather than compliance costs.<sup>112</sup>

**Box 3: Key pieces of analysis**

These impacts can be supported by three key pieces of analysis, which assess the costs to suppliers from smart data initiatives. Whilst looking at different industries, these assessments can provide some insight into the order of magnitude of these costs, serving as indicative estimates rather than precise unit costs for these proposals:

- a) The 2012 Midata Impact Assessment analysis<sup>113</sup> looks at the cost implications for data mobility, collating evidence through business surveys, engagement and roundtables. The report categorises one-off business costs into two categories; businesses who already hold data in an electronic, machine readable format, thereby reducing the size of costs to set up and gather data, and those who do not currently hold data in an appropriate format to share with consumers, implying greater costs to resolve this. Within their consultation, most businesses fell into the latter category, and costs were found to vary by the extent of required changes.
  - Major costs were highlighted as changing and installing IT systems, including designing a user interface and investing in secure IT hardware to convert consumption data into the required form, of which the cost would depend on the size of the business and nature of their current data management practices.
  - The analysis finds retail suppliers collate data on consumer spending habits, storing and managing these in systems not designed for consumer use, thereby requiring significant investment in IT infrastructure following regulatory change.
  - However, mobile phone companies were more likely to have data in an accessible format, due to practices in providing billing summaries and online usage summaries in PDF format. Hence, the cost of data portability under Open Communications could be less significant than some of the estimates provided in the midata impact assessment.
  - Ongoing costs of administration, maintenance and management were also found to vary. Across large businesses, including banking, mobile phones and energy firms, the ongoing cost of data portability was thought to be low as it is absorbed into overall IT strategies, with consultation responses estimating aggregate ongoing costs to be £1 million in the post pay mobile phone market (inflated to 2019 base prices). For small businesses, the cost may be larger.
  - Aggregating the equivalised annualised cost to business for implementation and ongoing compliance, the midata assessment estimates costs up to £2.1 million for mobile contracts (again inflated to 2019 base prices).
  - A final cost highlighted by the midata assessment is costs following additional switching brought on by Open Communications. Easing access to personal data should increase switching across providers, or products and services. The report estimates from consultation responses and scenario work that a one percentage point increase in switchers in post-pay mobile subscribers costs £30<sup>114</sup> per additional switcher.

<sup>112</sup> UK Finance (2020) [UK Finance proposes next steps for open banking](#)

<sup>113</sup> Department for Business, Innovation and Skills (2012) [Midata Impact Assessment](#)

<sup>114</sup> Inflated to 2019 base prices

- b) The UK Finance analysis<sup>115</sup> on Open Banking explores the costs of the scheme for the 9 banks within scope of the CMA order, reviewing a smart data scheme already in place within the banking sector. This report accounts for costs associated with immediate access to data and supplier compliance with more stringent standards, as well as indirect costs found in Open Banking such as staff time and consultancy fees. Surveying relevant firms, they estimate total costs of £1.5bn<sup>116</sup>. The study is limited by the lack of consideration for a counterfactual in the absence of the initiative, as IT infrastructure upgrades accounted for may have happened in time regardless of Open Banking. This suggests that direct costs to Open Banking are likely to be more in the tens of millions<sup>117</sup>.
- c) The third assessment is the Impact Assessment accompanying the Pensions Dashboard primary legislation<sup>118</sup> (DWP), which considers the costs of understanding, implementation and ongoing costs of the Pensions Dashboard scheme, a Smart Data initiative. On the costs to business, the assessment finds familiarisation costs amounting to £1.8 million (in 2019 base prices), and ongoing costs in the case of changing volume or value of Contribution Notice. It should be noted that the scheme here applies to thousands of suppliers, and hence the costs are likely to be relatively high compared to those of the telecoms market, with tens of suppliers.

At this stage, there is uncertainty over compliance costs. This Impact Assessment provides only limited estimates on these costs, covering a wide range of values. These estimates will be improved and informed through responses at later consultation. This will enable a full monetisation of detailed compliance requirements of proposals at Final Stage Impact Assessment.

### 3) Cost to business (not included in direct cost): Levy on industry for implementation entity

The scheme has the potential to fund the entity which regulates the Open Communications initiative via a levy on industry. This will impose further costs on suppliers. Under Open Banking,<sup>119</sup> the CMA's nine participating banks (the 'CMA9') are obliged to fund the implementation entity - as of 2021, CMA9 were asked to fund £26 million toward OBIE.<sup>120</sup> However, such figures are best thought of as investment into the implementation and management of the scheme, rather than ongoing costs, and may not represent a clear comparator for Open Communications.

Such estimations are likely to represent a much higher cost than comparable implementation costs for Open Communications under Option 3 or Option 2. Open Banking was unique in its implementation and funding, the Open Banking Implementation Entity (OBIE) is a new private body, with independent governance, composition and budget as determined by the CMA and funded via the UK's nine largest banks, overseen by the CMA, the Financial Conduct Authority and His Majesty's Treasury.<sup>121</sup> The costs of such an initiative are likely to have been much larger than for Open Communications, with much reduced operational and administrative implementation requirements.

Furthermore, as Open Banking was the first of its kind, it is possible that costs are higher through new softwares, processes and infrastructure needing to be created. There is the potential for cost efficiencies for the entity implementing Open Communications as a consequence, so £45m should be considered the upper bound to this expected cost.

Option 3 is likely to represent a higher levy cost to business, which would require the funding of a new body to implement and regulate the scheme. Under Option 2, whereby Ofcom runs the scheme, the levy is likely to be lower as the cost of giving Ofcom additional regulatory responsibilities will cost significantly less than the setup and funding of an entirely new body.

It should be noted that levies are excluded from the business impact target, and therefore the Equivalent Annual Net Direct Cost to Business calculation.

<sup>115</sup> Bank of England (2019): [New economy, new finance, new Bank](#)

<sup>116</sup> BEIS (2020) [Regulatory Powers for Smart Data Initiatives](#)

<sup>117</sup> BEIS (2020) [Regulatory Powers for Smart Data Initiatives](#)

<sup>118</sup> Department for Work and Pensions (2019) Pension Schemes Bill

<sup>119</sup> Finextra (2021) [Is UK open banking mature enough to survive without the OBIE?](#)

<sup>120</sup> UK Finance (2021) [Open Banking Futures: Blueprint and Transition Plan](#)

<sup>121</sup> Open Banking [OBIE structure and governance](#)

## Assessment of costs under different options

Under the different options presented in section 2.3, the costs are likely to vary. Option 3 will require significantly higher costs to set up, requiring the creation of APIs, the ongoing provision of customer data to customers and TPPs on demand, as well as product and performance data. The database will have a larger capacity and will require more resources to build and maintain it, compared to Option 2 which is limited to storing a series of customer data in a CSV file ready for instant download by consumers. Moreover, Option 3 will require more funding to set up the new implementation body, supported by levies and charges on industry which are likely to be significantly greater than nominating Ofcom as the implementation body and increasing the existing levy placed on industry, as per Option 2.

## Impacts to Third Party Platforms (TPPs)

The Open Communications initiative presents the opportunity for third party platforms to offer new innovative data services, to help consumers make better use of their data, compare a wider range of deals and ultimately encourage switching.

In their consultation, Ofcom outlined a range of potential impacts of an Open Communications scheme, outlining the key differences between the current situation and data access under a full implementation (Option 3) scenario.<sup>122</sup> As noted:

- Data from the customer's provider would be available to third parties, at the customer's request. Third parties could be confident of its accuracy. Access to more and better data could enable further innovation by more third parties.
- Third parties would have access to more data about products, on which basis they could compare them: e.g. address-level broadband availability and speed information.
- [It] would be simpler for third parties to use and interpret data from different providers and to present clear, reliable product comparisons.
- Open Communications and other data mobility initiatives could allow third parties to access richer data directly from communications providers and firms in other sectors.

We identify a number of costs and benefits to Third Party Platforms (TPPs). TPPs are expected to be one of the main beneficiaries of Open Communications. While opting in may impose some costs to business, as detailed below, it is important to note that third parties will only incur costs if they voluntarily choose to engage in the scheme, due to expected net benefits. While costs are outlined as a demonstration of the mechanism, the net effect will be a benefit to third parties.

### 4) Benefit to business: third party platform productivity and business formation

We expect one of the main beneficiaries of data portability in telecoms to be third party platforms (TPPs). Such businesses will be able to capitalise on newfound data access in order to create new products, diversify or enter the market.

According to recent analysis of the Open Banking regime, in mid 2022, there were 339 regulated providers, 249 of which were third party providers and 139 had live customers.<sup>123</sup> Third party tools have had a very strong uptake, with around 4.5 million regular users of Open Banking (3.9 million consumers and 600,000 small businesses), cumulatively over 26 million payments made by the end of 2021,<sup>124</sup> and more than 4 million payments made in 2020.<sup>125</sup> Latest data suggests users have risen to 6.5 million in 2023<sup>126</sup>.

If similar benefits were seen as a result of telecoms open portability, large benefits would accrue to these TPPs. These third party platforms are likely to see significant benefits through output or increased

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<sup>122</sup> Ofcom (2020) [Open Communications Consultation](#)

<sup>123</sup> OBIE (2022) Open Banking highlights – May 2022 <https://www.openbanking.org.uk/wp-content/uploads/MAY-2022-Monthly-Highlights.pdf>

<sup>124</sup> OBIE (2021) Open Banking Press Releases

<sup>125</sup> Open Banking (2021) Three years since PSD2 marked the start of Open Banking, the UK has built a world-leading ecosystem

<sup>126</sup> OBIE (2023) Open Banking Press Releases <https://www.openbanking.org.uk/news/category/press-releases/>



productivity. They may be able to offer innovative services, attracting new customers, as well as reducing the time and processing needed for existing services to collate individuals' data for them, once new standards are set on provision of data. The benefits to small and micro firms (SMFs) and TPPs are identified in a report by Frontier, which estimates the productivity benefits of Smart Data to both new and existing TPPs, with new TPPs experiencing significantly higher benefits. Cost savings were also noted to vary across sectors, though communications accrued fewer benefits than banking and finance sectors.<sup>127</sup>

#### 5) (Indirect) Cost to business (third parties): Accreditation fees

Third parties who provide innovative data services will need to seek accreditation to access and use consumers' data, which will be a voluntary business expense, indicating for a firm this will not represent a net cost.<sup>128</sup> TPPs will only incur costs if they choose to opt into the scheme. Therefore, benefits will necessarily outweigh these costs to TPPs, who will receive net present benefits of Open Communications. This will be fully discussed at the final stage.

Such costs are sector specific and would require evidence to estimate the total amount. An analysis by HM Treasury on the implementation cost of Payment Service Directive II<sup>129</sup> under Open Banking provides the only comparable estimate of accreditation costs. The analysis for the 175 relevant credentialed providers finds a one-off accreditation application and compliance support costs £2.9 million, totalling annually £12.8 million.

#### 6) (Indirect) Cost to business (third parties): Setup and familiarisation

As with suppliers, third parties will also need to spend time and money reviewing the legislation, working out the services which they can provide, and all costs associated with setting this up. There is not sufficient evidence to provide cost estimates for setup and familiarisation within third party providers, and we will seek more precise estimates at later consultation. As above, firms will identify a net benefit from providing the service prior to incurring these costs, as they voluntarily choose to engage in the scheme.

#### 7) (Indirect) Cost to business (third parties): Processing and use of data

Once accessing the data, third party platforms will need to process and use the data to benefit consumers. This may involve IT infrastructure to read and sort the data, and to match the consumption habits of the individuals' data to a range of other offers on the market. Their services may also need to enable consumers to switch deals or providers once they have reviewed the recommendations of the third party. This will impose setup costs, as well as ongoing management and maintenance costs of storing the data and updating deals on the market. As the scheme is voluntary, firms will only choose to opt-in to Open Communications if they envisage the benefits outweighing the costs, and hence will receive net present benefits. We intend to develop precise cost estimates at a later stage, when there is further clarity on options.

### **Direct benefits to businesses as end-users of telecoms products**

#### 8) Benefits to Small and Medium-sized Enterprises (SMEs) from greater switching to better-suited deals

In a similar way to consumers, SMEs are able to benefit from data portability in helping navigate a complex market. Qualitative research<sup>130</sup> by Ofcom has found the market for SME providers to be more complex and fragmented than that for residential customers, and many of the barriers faced by residential consumers are faced more acutely by SMEs with complex needs, or those who are highly vulnerable to disruption from loss of service.

The research found that decision makers within SMEs may lack expertise in communication services and their businesses' needs. As their requirements become more specialist, even at a moderate level, the comparison of available deals in the market becomes more difficult. Third parties, using Open Communications, are able to provide a valuable service here in creating digital comparison tools to help SMEs compare providers and packages and find their optimal deal. SMEs with highly complex needs are

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<sup>127</sup> Frontier Economics (2022) [Estimating the benefits to third party providers and small and micro firms from Smart Data](#)

<sup>128</sup> BEIS (2020): [Regulatory Powers for Smart Data Initiatives](#)

<sup>129</sup> HM Treasury (2017): [Implementation of the revised EU PSDII](#)

<sup>130</sup> Ofcom 2020, [Open Communications qualitative research](#) slide 20

likely to already use a broker to find suitable communications products, therefore the scheme may benefit most the SMEs with moderately complex needs who need to make difficult product comparisons.

This research also identified large SMEs expenditure, with £1.4k spent per year on average on communications, and spending increasing as firms grow in size; from an average of £1,105 in 0-4 employee businesses to an average of £11,323 in 50 to 249-employee businesses. This shows that Open Communications may be particularly valuable to smaller businesses with a higher cost per employee, who are more likely to face barriers to switching.

Among the responses to Ofcom's consultation, multiple responses highlighted the particular benefit to SMEs in that the current lack of transparency and lack of publicly available information on SME tariff options makes it difficult to make comparisons in the same way residential customers are able to. Research by BillMonitor<sup>131</sup> estimated SMEs to overspend by 96% due to market complexity, relative to 66% within the residential market.

The number of small business consumers - who can purchase telecoms packages that are principally designed for residential consumers and are defined as having less than ten employees<sup>132</sup> - is approximately 5 million, indicating a large potential business base that could stand to gain from data portability and increased switching.

There remains uncertainty of the precise impacts to smaller businesses, which may receive benefits and costs. We are not aware of detailed data on the loyalty penalty of switching issues within business customers, but 2017 research on the SME experience of communications indicates that some SME face issues with telecoms switching and customer satisfaction. According to Ofcom and Jigsaw Research (2017), SMEs generally felt that they had plenty of choice of suppliers and services but some thought it can be difficult to compare across suppliers 'especially in relation to network quality, customer service, tariffs and price'. While most SMEs found switching to be straightforward, a 'fairly high proportion experienced some problems. Most commonly, their existing provider trying to 'save' them money, receiving bills for the cancelled service, the process taking longer than expected, and/or temporary interruption to their service.<sup>133</sup>

We therefore expect there to be some similarities between business customers and individual household consumers. We expect there to be large potential benefits to small and micro businesses from Open Communications, compared to potential for fairly small costs (familiarisation, data controlling requirements). We will monitor these closely at later appraisal, and will seek input from affected groups at a later consultation.

## Other impacts

This section details other expected direct impacts accruing to parties other than businesses; including impacts to the public sector and to consumers. These are considered direct impacts as a first-round result of the changes.

### Impacts to the public sector

#### 1) Cost to public sector: funding and set-up

The final design of Open Communications will determine the costs to the public sector. An implementation body and/or funding for enforcement activity will be needed, depending on the implementation options with the costs borne by:

- a) A levy on industry, as with Open Banking
- b) Third-parties through API usage or access charges
- c) Government, funded through taxation

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<sup>131</sup> BillMonitor (2020) [Response](#)

<sup>132</sup> House of Commons library (2021) [Business Statistics](#)

<sup>133</sup> Ofcom and Jigsaw Research (2017) [The SME experience of communications services: research report](#)

The costs to the public sector will need to fund and set-up the implementation body will potentially be funded by taxation. This cost will depend on the scale and detail of the eventual Open Communications scheme, but the size of the previous schemes provide indicative estimates: UK Finance<sup>134</sup> estimates Open Banking saw a £32 million per year budget for the implementation entity between October 2016 – April 2019, with the total budget in this period at £81 million, indicating the size of the potential cost to the government to set up such an entity. Efficiencies from the set up of Open Banking may reduce the cost to setting up the initiative in different sectors, and furthermore some activities that will be performed by the implementation body may already be being undertaken by government, firms or trade bodies voluntarily, hence a transfer of costs. However, more evidence needs to be gathered in order to provide further clarity on funding and likely cost implications.

## 2) Cost to public sector: ongoing operational costs / resource of implementation bodies and enforcement

As noted above, an annual budget will be needed to fund the implementation body, to cover ongoing management and regulation of Open Communications. For Open Banking, UK Finance estimates an annual budget of £32 million. The precise amount of the operational budget and resource implications are dependent on the details of the scheme.

## Impacts to consumers

### 3) Benefit to consumers: cost savings, resulting from increased switching rates

The primary benefit to consumers and SMEs from Smart Data schemes will be the cost savings they achieve by being more engaged with the market, chiefly by increased switching rates. As discussed, low switching and poor market engagement is a persistent issue in the complex telecoms market. When better informed by data, and supported by related tools, consumers are able to make different consumption choices more suited to their needs. With increased switching, or recontracting with the same provider, loyalty penalties may be avoided, resulting in cost savings to consumers and SMEs through switching to better suited offerings with lower fees. Over time, this may reduce the average price gap charged between different customers on identical products.

The loyalty penalty is defined as systematically higher prices, on average, charged to existing customers compared to new customers or those who negotiate. The causes of this can be differences in customer likelihood to negotiate or switch providers, due to motivation, understanding or confidence. It should be noted that recontracting with the same provider may be an effective remedy to the loyalty penalty in some cases; nonetheless, the persistent issue of low market engagement often manifests as low engagement with current provider, through low switching or not recontracting. Businesses may benefit from market features such as complex products which raise search costs or by making it difficult for customers to access information.<sup>135</sup>

The current magnitude of the loyalty penalty in telecoms varies by sub-sector: At an aggregate level, Ofcom has estimated that in total, broadband customers overpay £500 million per annum and £182 million per annum for mobile services.<sup>136</sup> Moreover, their updated review found around 35% of broadband customers were out of contract, consequently paying on average £5.10 per month<sup>137</sup> more than necessary for their services.

Ofcom's Open Communications consultation<sup>138</sup> highlighted key benefits of initiatives to be: more customers switching to better deals (financial and consumption benefits), and reduced time and effort needed to search for a new deal. Here we assess the switching benefits to consumers from data portability by estimating the

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<sup>134</sup> Bank of England (2019): [New economy, new finance, new Bank](#)

<sup>135</sup> CMA (2018) [Tackling the loyalty penalty: Response to a super-complaint made by Citizens Advice](#)

<sup>136</sup> Ofcom (2020) [Helping consumers get better deals: Review of pricing practices in fixed broadband](#)

<sup>137</sup> Ofcom (2021): [Telecoms customers saving millions as Ofcom rules bed in](#)

<sup>138</sup> Ofcom (2020) [Consultation: Open Communications — Enabling people to share data with innovative services](#)



likely reduction in consumer loyalty penalty in the telecoms markets: we focus on mobile phones and broadband internet, the two largest markets.

There have been initiatives and actions taken in the interim to reduce the penalty.<sup>139</sup> We aim to use the latest estimates of the unit cost loyalty penalty and customer base by telecoms market and adjust for recent trends to construct a counterfactual of the current size of the penalty and likely future cost over ten years.

## **Mobile**

Mobile phone customers with a pay-monthly contract (rather than pay-as-you-go) have a number of different options for how they buy their mobile handset. These are broadly categorised as bundled contracts (a single contract for a handset and usage), split contracts (two contracts at the same time, one for the usage and one for the handset, with monthly cost split for each), and SIM-only options (covering only usage). The main issues, as identified by Ofcom, occur for customers on bundled contracts who may continue paying after the end of their minimum contract period, who are often overpaying.

Ofcom analysis from 2019 indicated that around two million customers are 'out-of-contract' (beyond their minimum contract period), 11% of all customers on bundled contracts, and less than 5% of all pay-monthly customers. It was estimated that most (around 1.4 million customers) are overpaying but not all are.

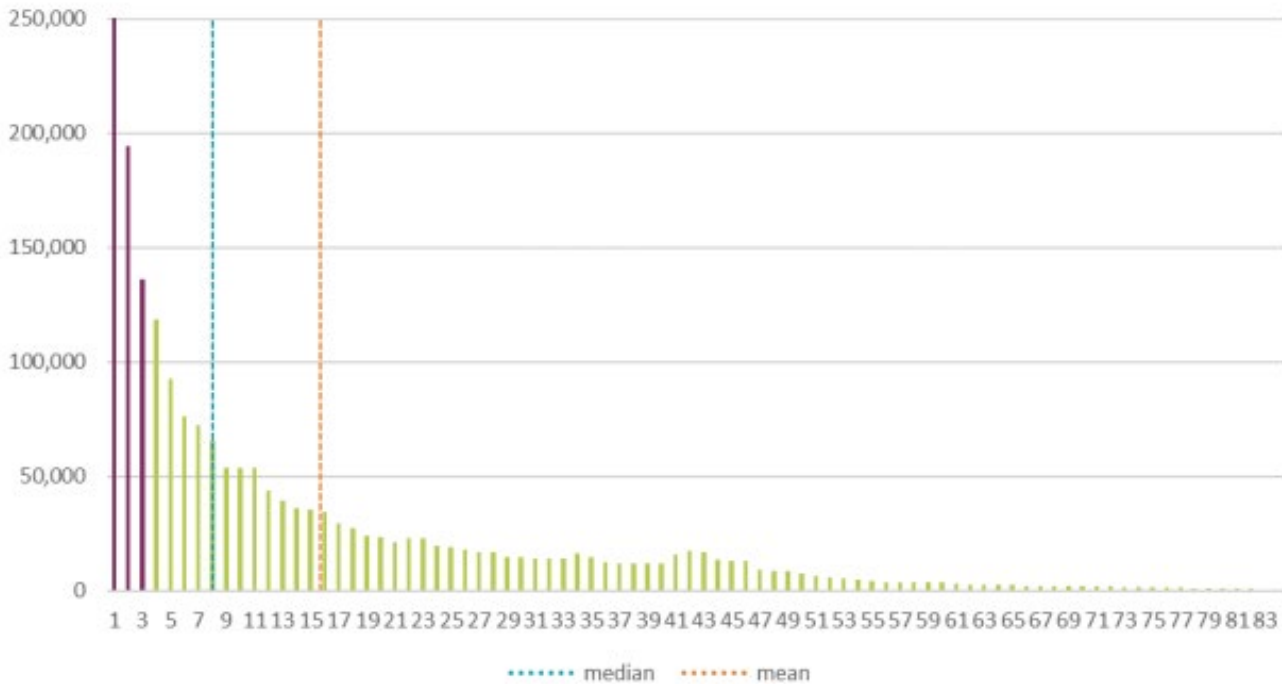
Furthermore, there is large variation in the length of contract expiry and loyalty penalty cost. There is a large proportion of individuals who have only been out of contract for 1-3 months, with 29% of customers having been out-of-contract for fewer than 3 months and 62% for a year or less. However there is also a long tail of customers with a very long period out-of-contract, and a median of around 8 months spent out of contract compared to a mean around 16 due to the skewed distribution.

Although Ofcom do not provide a more recent analysis of mobile contracts, the latest pricing trends report suggests that, overall, 29% of post-pay mobile customers were out of contract at the end of Q2 2022.

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<sup>139</sup> For example: July 2019 - Ofcom announces voluntary commitments from mobile phone companies, except Three, to help address the loyalty penalty. September 2019 - Ofcom announces voluntary commitments from broadband companies.

**Figure 9: Distribution of months spent out-of-contract; >7 years excluded**



Source: Ofcom (2019)<sup>140</sup>

To estimate the cost of the loyalty penalty, Ofcom matched each out-of-contract bundled customer to a 30-day SIM-only tariff with their current provider. They calculate the difference between the price paid on each bundled tariff and the price for a comparable SIM-only tariff, to estimate the potential savings for each out-of-contract customer. They use three matching methods<sup>141</sup> using a baseline methodology. The average amount of overpayment for those who overpay is just under £11, with considerable variation: 22% of these customers could save less than £5 per month; but nearly 20% of these customers could save more than £15 per month.

**Figure 10: Estimates of overpayment by matching method used by Ofcom**

Matching method	Average monthly overpayment per out-of-contract customer	Average monthly overpayment per out-of-contract customers who would save money on a SIM-only contract	Average annual overpayment per out-of-contract customer
Baseline	£5.91	£10.83	£37.08
'Data only'	£6.27	£11.10	£39.61
'Closest data match'	£7.51	£11.26	£47.61

Source: Ofcom (2019)<sup>142</sup>

Others are not overpaying at all and do not suffer a loyalty penalty from being out of contract. More than a quarter (27%) of out-of-contract customers would be financially better off staying on their current deals rather than switching to SIM-only.

<sup>140</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets](#)

<sup>141</sup> a) Baseline methodology, which matches the customer to a SIM-only contract with the same or greater allowances of data, minutes and texts; b) 'Data-only' method, matching to a SIM-only tariff which maintains only the current data allowance as a minimum; and c) 'Closest data match', matching to a SIM-only tariff with the closest data allowance, in absolute terms

<sup>142</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets](#)

**Figure 11: Savings available to the out-of-contract customers (under the baseline matching method)**



Source: Ofcom (2019)<sup>143</sup>

Importantly, Open Communications does not mandate or enforce switching, but instead improves the data, and likely tools, available to individual customers. Therefore, only out of contract customers who are overpaying are likely to be affected; out of contract individuals who are not overpaying can remain on their current tariffs if no better deals are available.

### Baseline scenario

In order to estimate potential benefits of increased switching due to Open Communications, we create a likely estimate of the current loyalty penalty to consumers in 2022 and expected loyalty penalty under a 'do nothing', or business as usual, scenario.

The Ofcom 2019 analysis represents the most detailed and comprehensive analysis of the loyalty penalty in mobile markets to date, so we use this as the foundation of the analysis. Nonetheless, there have been developments and changes in the time since this publication, and we aim to adjust accordingly based on more recent data and information.

We use Ofcom's conservative estimate of £10.83 per month in overpayment as a starting point. Given other higher estimates of the cost of repayment,<sup>144</sup> we consider this to be a lower-bound conservative estimate of the financial costs of overpaying due to the loyalty penalty. It should be noted that this differential of £10.83 is an indication of the current difference between those in-contract and out-of-contract but this may be altered if the reform impacts a large number of customers. There is a chance that if a large proportion of customers begin switching, that providers may be incentivised to increase prices for in-contract customers to recover lost revenue. This potential 'waterbed' effect is considered to be minor, if at all, due to the relatively small proportion of new switchers assumed.

We update Ofcom's 2019 estimates following more recent Citizen Advice analysis from April 2021 which, importantly, was conducted after the start of the Covid-19 pandemic, and adjust for two important developments.<sup>145</sup> Firstly in February 2020 Ofcom required providers to send notifications when customers reach the end of their contract; secondly, voluntary commitments from providers suggested by Ofcom. This analysis adjusted Ofcom's estimates on the size of the loyalty penalty, in light of mobile provider

<sup>143</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets](#)

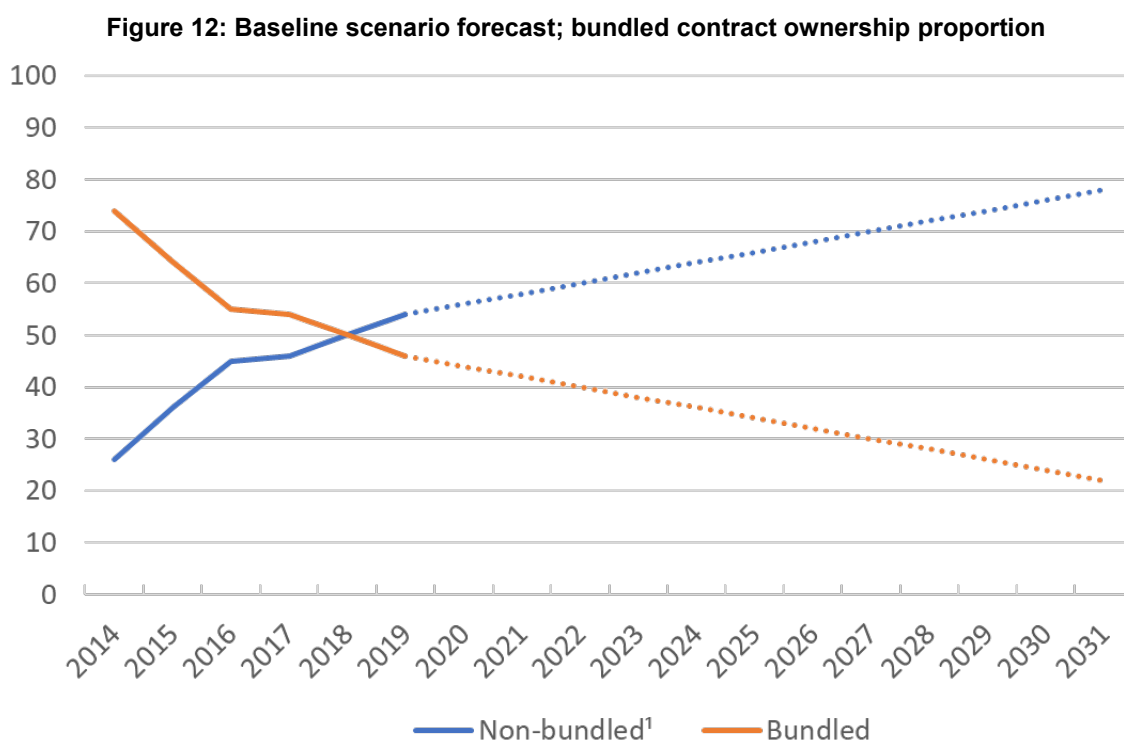
<sup>144</sup> Citizens' Advice estimated a potential monthly saving of £22 for an average out-of-contract customer, based on desk research of 721 bundled and SIM-only tariffs available at the time from the main providers. Ofcom's 2018 Pricing Trends report estimated an average monthly handset charge (and therefore potential monthly saving) of £18.52

<sup>145</sup> Citizens Advice (2019) [Finishing the job on the loyalty penalty The mortgage and mobile handset markets](#)

commitments<sup>146</sup> and an increase in switching from customers on bundled contracts after end of contract notifications.<sup>147</sup> The analysis does not adjust differentials for the now common use of annual in-contract price rises, linked to a measure of consumer price inflation.

Nonetheless, the loyalty penalty remains substantial. The analysis indicates there is a total loyalty penalty overpayment of around £113 million annually.

There were around 17.9 million customers on bundled contracts in total in 2019<sup>148</sup>, with around 46% of consumers on bundled relative to unbundled contracts. This proportion had been falling steadily over the six years when data was available. As noted by Ofcom, in 2019 bundled contracts accounted for less than half of the pay-monthly market, down from 74% in 2014, a trend we expect to continue as customers increasingly buy their handsets separately. We therefore forecast this trend forwards over the appraisal period of 2022-2031, extending the trend of roughly 2% annual decline in bundled contracts as a proportion of total. This has been supported by the latest Ofcom data which shows bundled contracts made up 43% of total mobile subscriptions in 2022.<sup>149</sup>



Source: Ofcom data; DSIT analysis

1: includes 30-day SIM-only, 12-month SIM-only and split contracts

Ofcom estimated 1.4 million people were paying the loyalty penalty in 2018<sup>150</sup>. We then adjust this total, allowing for a proportion of individuals who switch due to receiving end-of-contract notifications. Based on Citizen’s Advice analysis, 40% of consumers received end-of-contract notifications, of which two-thirds switched. This effectively reduces the loyalty penalty by lessening those who are out of contract on bundles, reduced by a factor of 27%, so we reduce Ofcom’s totals by around 375,000.

<sup>146</sup> Virgin Mobile and Tesco committed to completely ending the loyalty penalty for all of their customers on bundled contracts. O2 have also stopped charging their customers a loyalty penalty, including indirect customers who had their initial contract with Carphone Warehouse, who are moved onto an O2 contract at the end of their fixed term, unless they opt out and switch provider. From [Citizens Advice \(2019\)](#)

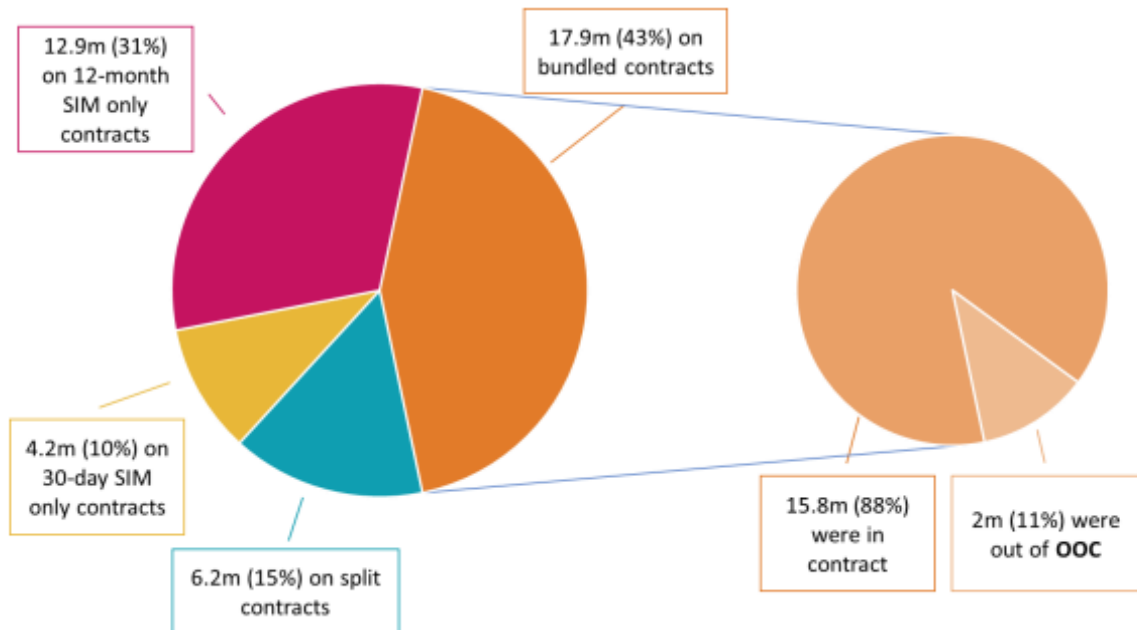
<sup>147</sup> The analysis found around 40% of customers on bundled contracts were eligible to switch since the first coronavirus lockdown in March 2020, of which one in three who could have switched did not. From [Citizens Advice \(2019\)](#)

<sup>148</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets](#)

<sup>149</sup> Ofcom (2022) Pricing trends report

<sup>150</sup> This is taken from quantitative analysis from [Ofcom \(2019\)](#) based on data requested from the four UK mobile network operators (EE, O2, Three and Vodafone). It assessed the total number of in-contract and out-of-contract customers, from the specific dates of 1 February 2018, 1 May 2018, 1 August 2018 and 1 November 2018. The information request covered the following services: i) bundled contracts; ii) split contracts; and iii) 30-day and 12-month SIM-only contracts.

**Figure 13: Proportion of customers on bundled contract; proportion of bundled customers out of contract**



Source: Ofcom (2019)<sup>151</sup>

Previous analysis from Ofcom notes that 11% of all customers on bundled contracts are out-of-contract. We similarly reduce this figure (which was calculated in 2019) by 27%, to account for recent changes in end of contract notification, for example. We therefore predict that 8% of those on bundled contracts will be out of contract.

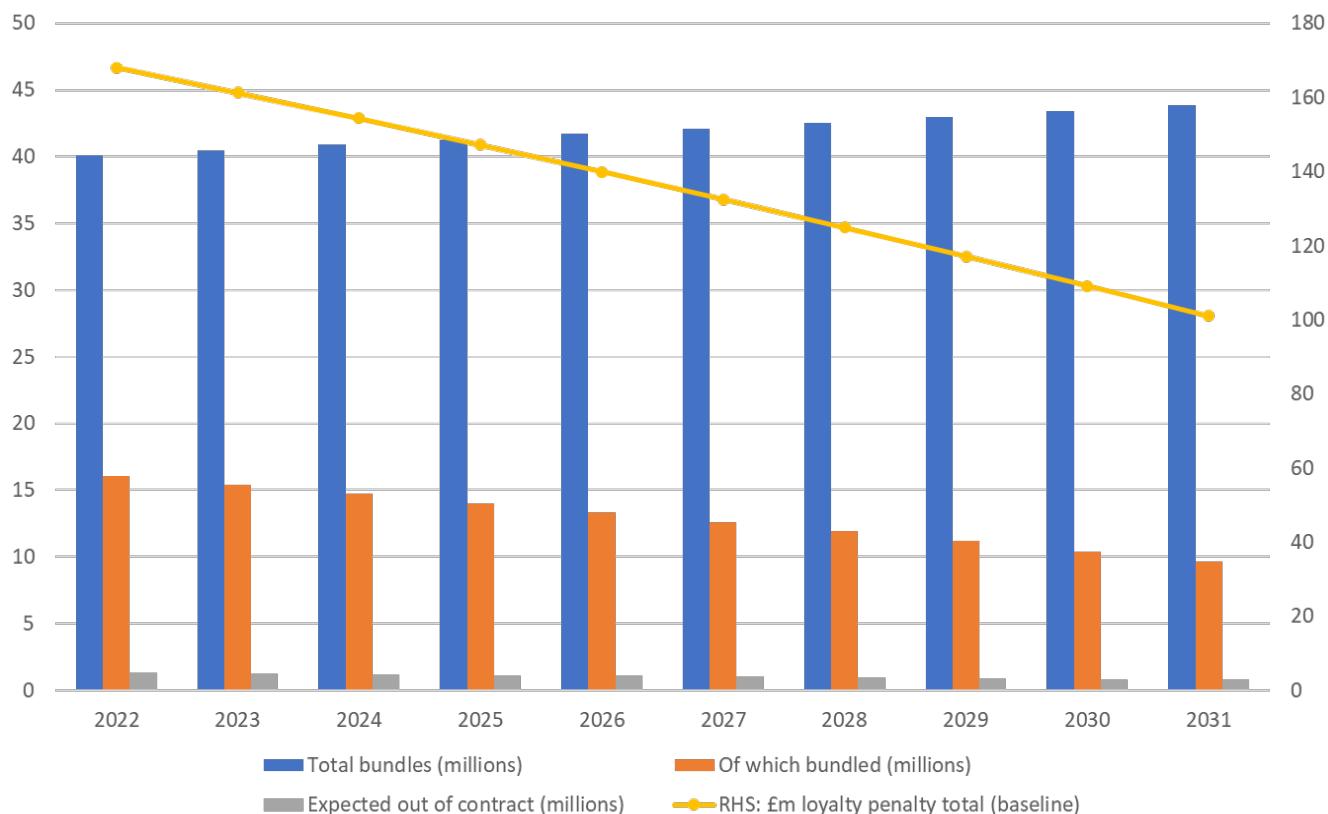
According to Ofcom’s baseline matching method, while the majority of out-of-contract customers (70%) would save money on a comparable SIM-only tariff, saving £10.83 on average, whilst a material proportion (27%) would be financially better off remaining out-of-contract on their current tariff. We extend these figures forward as reasonable conservative estimates of the cost of overpaying. Extending forward the total number of bundled contracts by the average growth rate observed from 2012-2020 for total mobile subscribers<sup>152</sup>, we forecast total mobile subscriptions to increase slightly, whilst total consumers on bundled contracts to fall slightly over time.

Forecasts for the total number of out-of-contract customers are shown below. Whilst this represents the total stock of individuals who are out-of-contract per year, there is expected to be some movement of individuals into and out of this category, with the total number of out-of-contract individuals expected to fall over time.

<sup>151</sup> Ofcom (2019) [Helping consumers to get better deals in communications markets: mobile handsets](#)

<sup>152</sup> Source: GFK data, March 2019

Figure 14: forecast baseline scenario



### Calculating marginal benefits relative to baseline

The impact of a higher switching rate, and subsequent reduction in overpayment, of a comprehensive data portability scheme in telecoms is uncertain. However, we are confident it is likely to have a positive impact and can take evidence from previous comparable studies to estimate the marginal benefit that Option 3 (comprehensive Open Communications) will have.

Comparable data portability initiatives and evidence of increased switching:

- Citizens Advice indicate around around half of broadband customers remain with their provider as they trust them, despite four in five paying a loyalty penalty - if only a low proportion of these customers were informed of this penalty via Open Communications, this would constitute a significant benefit.
- Furthermore, evidence indicates that around one in ten individuals report that difficulty or complexity in the switching process prevents them from switching.<sup>153</sup> Given that the expected impact of data portability is easier access to user data, improved switching applications and price comparison, it is likely and reasonable to assume that Open Communications will have a positive impact on switching rates and prevent overpaying costs to consumers.
- Open Banking, launched in 2018 to make it easier to compare tariffs comparability and address persistent low switching rates for personal current accounts, appears to have had a positive impact, with a slight uptick in the level of switching activity by 2020, of around 10%.<sup>154</sup> However, it may be too early to confirm the lasting impact and others have doubted the evidence confirming Open Banking has yet increased switching between current account providers.<sup>155</sup>

<sup>153</sup> 10% of respondents with a broadband contract and 8% of those with a mobile handset contract said they had stayed in part because moving was too time-consuming

<sup>154</sup> Source: Current Account Switching Service; from Giovannetti and Siciliani (2020) [The Impact of Data Portability on Platform Competition](#)

<sup>155</sup> Bowman (2021) [Why Data Interoperability Is Harder Than It Looks: The Open Banking Experience](#)

- The Open Banking Implementation Entity<sup>156</sup> (OBIE) estimates aggregate benefits of up to £12bn a year for consumers, and a further £6bn for businesses, with a specific category of “overstretched consumers” saving up to £287 pa, or 2.5% of their annual income, whereby avoidance of bank fees and the optimisation of products presented financial gains and cost saving to consumers.

Although there is significant uncertainty of the consumer response in terms of switching, which is a complex decision and contingent on many factors and available tools, on the above evidence we estimate that an increase in switching rate of 5% is a sensible central bound. Due to uncertainty over these estimates, we also conduct sensitivity analysis on the key assumptions, at the end of this section.<sup>157</sup>

Under Option 3 - the full implementation of Open Communications conservatively model a **5% increase in switching and equivalent reduction in overpaying**. This is likely to feed through over time, which we expect to have full effect by the third year after implementation, with a constant linear increase until this year. This is in line with the time taken in previous open data initiatives, such as Open Banking, and for applications to fully reach the market and consumers.

We consider these estimates to be conservative and consider that a larger increase in switching rates, and reduction in loyalty penalty, is possible. It is possible that innovations enabled by Open Communications will drastically increase the switching rates and bring the loyalty penalty currently seen by removing the opportunity for firms to charge out-of-contract customers. This is a possible effect of increased competition, lowering the incentives and payoffs available for telecoms providers to charge higher prices to loyal customers. Competition may increase innovation, improve products and reduce discriminatory pricing practices. However, this is uncertain and we do not monetise this here, but rather consider these benefits in the section under Wider Impacts on competition.

For Option 2, a limited Open Communications scheme, we expect this increase in switching to be significantly lower but still be a positive benefit for consumers. Given the primary mechanism to support consumers will be the creation of new tools and personalised information, which will be limited under Option 2, **we expect a much smaller magnitude of increased switching, and comparable reduction in overpaying of 2%, also by the third year.**

The primary reasons we expect Option 3 to result in greater levels of switching than Option 2 is the degree to which it enables new services/tools with consumer data, and the degree to which it addresses the underlying barriers and frictions to market engagement. It is understood that ongoing access to consumer data through an API enable a wide array of new applications. Option 3 represents more frictionless access to consumer data, with consent, so more directly solves the underlying issues preventing greater switching and market engagement as described earlier (see Box 1).

Under Option 3, in which full Open Communications reduces the loyalty penalty by 5%, relative to its projected baseline, benefits to consumers would average £4m a year, and benefits of £35.7 million over a ten year period (discounted).

Under Option 2, in which a partial scheme reduces the loyalty penalty by 2% relative to the baseline, benefits to consumers would average £1.7 million a year, and benefits of £14.3 million over a ten year period.

## **Broadband**

Unlike mobile phone markets, bundled packages are increasingly the norm within internet and fixed line provision. Purchasing a bundle is typically cheaper than buying the same services separately from multiple providers, and consumers enjoy the convenience of receiving one bill. Although we note bundled packages

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<sup>156</sup> OBIE representatives (2019) [Consumer Priorities for Open Banking](#)

<sup>157</sup> Although 5% is a relatively small proportion of affected customers, it is noted that Open Communications is expected to motivate and support a consumer group with currently low engagement with the market. End-of-contract notifications have recently caused a set of consumers to switch or recontract, so the potential beneficiaries of Open Communications - as yet unaffected by this change, may be particularly hard to reach.



will decrease as consumers move to increasingly available fibre to the property products, where a fixed line is not required. About 3 million UK homes took standalone broadband at the end of June 2022, more than double the number two years previously.<sup>158</sup>

According to Ofcom's Technology Tracker, 33% of UK consumers took a dual-play service of landline and broadband, 22% a triple-play bundle comprising landline, broadband and pay-TV, and 5% a quad-play bundle of landline, broadband, pay-TV and mobile services. Ofcom estimate that just under eighty per cent of UK households purchased two or more communications services from the same service provider as part of a bundle in 2022.<sup>159</sup>

Nonetheless, the loyalty penalty is an issue in the broadband market, and similarly often caused by consumers being out of contract. In 2017 Citizens Advice found that broadband customers face an average loyalty penalty of £113 for every year they stay in their contracts after their initial contract period ends, a 43% increase on the initial price. This was far higher than other sectors such as energy, with more than 9 in 10 (96%) consumers thinking this penalty is unfair.<sup>160</sup>

The cost of broadband after the initial contract period is rarely included in advertising and is often hard to locate on providers' websites. Over a third of customers (35%) say it was not straightforward to find a good deal in essential markets and 35% of customers were then unaware of the loyalty penalty. Citizens Advice found that vulnerable customers were at a greater risk of experiencing the loyalty penalty, particularly older and lower income groups were more likely to be loyal. For example, customers aged 65 and over were more than twice as likely than younger customers to have been in the same contract for over 10 years.<sup>161</sup>

Later analysis from Ofcom updates this analysis, and also forms the benchmark for our estimates on the consumer impacts of greater switching in broadband.<sup>162</sup> This research collected a large amount of data from over 20 million customers, updating analysis of broadband prices, and serving as a baseline for future monitoring of the broadband sector, against which we also intend to monitor changes over time in the Monitoring and Evaluation of this scheme.

In this report, Ofcom found that around 35% of broadband customers are out-of-contract. These customers pay around £5.10 more per month than their provider's average price for their service. This figure is actually lower on average for vulnerable customers for which the loyalty penalty for being out of contract is £2.30.<sup>163</sup> Overall, they estimate the impact of price differentials on out-of-contract customers is just under £500 million annually, and for vulnerable out-of-contract customers it is just under £80 million annually.

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<sup>158</sup> Ofcom (2022) Pricing trends report

<sup>159</sup> Ofcom (2022) [Pricing trends report](#)

<sup>160</sup> Citizens Advice (2017) [Exploring the loyalty penalty in the broadband market](#)

<sup>161</sup> Citizens Advice (2017) [Exploring the loyalty penalty in the broadband market](#)

<sup>162</sup> Ofcom (2020) [Helping consumers get better deals: Review of pricing practices in fixed broadband](#)

<sup>163</sup> To note this is based on provider recording of vulnerability, taking into account all indicators providers hold. Taken from Ofcom (2021): [Telecoms customers saving millions as Ofcom rules bed in](#)

**Figure 15: Customer outcomes in broadband**



*\*The cross-hatched area shows the proportion (19%) of all out-of-contract customers with a vulnerability indicator. This is similar to the proportion (18%) of all customers, both in- and out-of-contract, with a vulnerability indicator*  
*\*\*To calculate this, individual OOC customers' prices are compared to the average price of a similar product of that provider.*

Source: Ofcom (2020) Helping consumers get better deals: Review of pricing practices in fixed broadband

According to Ofcom's Review of pricing practices in fixed broadband 8.7 million are overpaying on their broadband, a far higher figure than on mobile contracts. Similar to mobile, engaged customers tend to get better deals, and remaining in contracts beyond expiry can result in considerable penalties.

Ofcom uses an updated new approach to calculate the impact of price differentials on out-of-contract. Using this measure, they arrive at a per-person monthly differential of £5.10. More detail on this approach is provided later in this section. To note, this differs by broadband provider. We use this as a conservative unit benefit per user who switches as a result of Open Communications relative to the baseline.

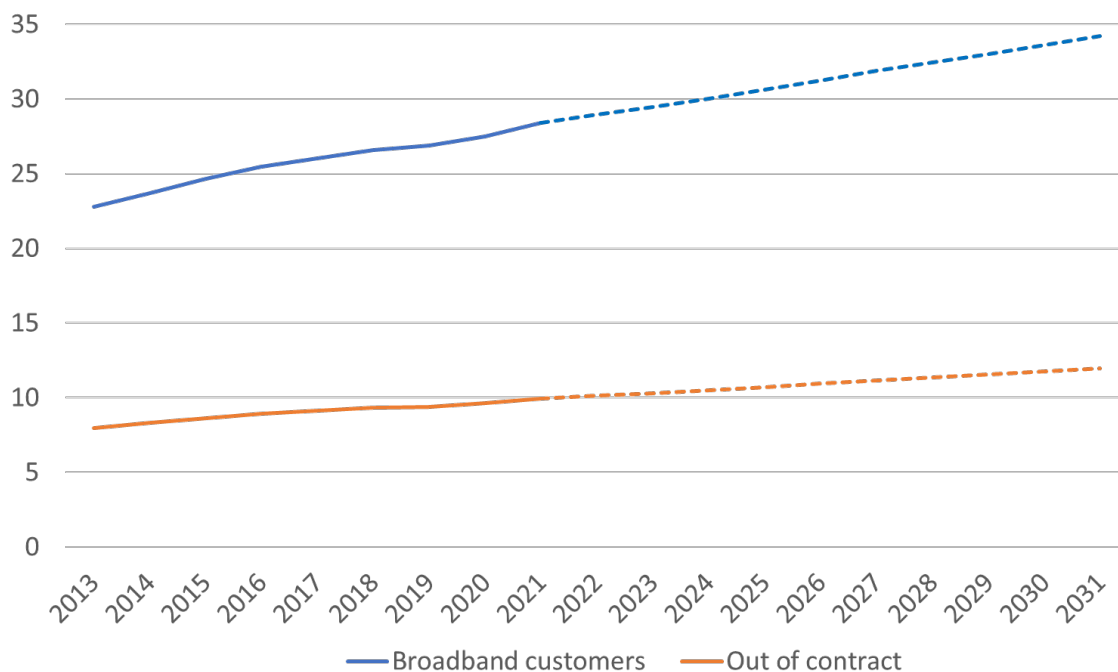
**Figure 16: Average monthly price differentials paid by broadband customers**

	Average price differential paid per month, across providers (September 2019)	Average price differential paid per month, across providers (November 2018)
Out-of-contract price – average price	£4.70	£4.70
Out-of-contract price – new customer price	£13.00	£10.40
Out-of-contract price – re-contracted customer price	£9.70	£8.60
Re-contracted customer price – new customer price	£4.40	£3.70

Source: Ofcom analysis of provider data

In our baseline scenario, we assume the amount of broadband customers increases in line with average annual growth from 2013-2020, on which Ofcom data is available. We also assume that the proportion of out of contract customers remains constant at 35%, which we deem to be the best available assumption.

**Figure 16: forecast baseline scenario; total and out-of-contract broadband customers**



Using similar assumptions as used above for mobile, in Option 3, we expect a potential 5% increase in switching and equivalent reduction in overpaying. We also expect this to feed through over time, with the full effect by the third year after implementation and a constant linear increase until this year.

Using these assumptions, the potential benefit to consumers of increased switching and reduced loyalty penalty costs associated with being out of contract is £30.6 million a year, and £258 million over 10 years (discounted).

Under Option 2, assuming reduced switching increased by 2%, we estimate the benefit to consumers of increased switching averages £12.3 million a year, and £103 million over 10 years (discounted).

While these benefits are large, we believe they represent a conservative and realistic result of only a small increase in switching rates. At present, the impact of price differentials on out-of-contract customers is just under £500 million per year. Assuming the loyalty penalty remains steady at almost £5, and due to the large number of potential customers in scope, very large benefits are possible under even a slight increase in switching.

**Table 7: Net present value of consumer benefits from increased switching; £m (2022-2031)**

	Broadband	Mobile	Total
Option 2	£103.3	£14.3	£117.6
Option 3	£258.3	£35.7	£294.0

It is important to note that individuals who switch as a result of Open Communications may incur some time costs to complete the process. While quicker and simpler than the current process, as discussed in the below section on time savings, this will create some time-costs for individuals. This will reduce the total net benefits to consumers of switching, which is not monetised here, but this is expected to have only a small impact on the large net benefits of switching. This is because such new switchers are only likely to switch if the process is quick and easy. Furthermore, there are other potential benefits of increased switching which we do not monetise here, which may balance out these time costs.

We also believe other benefits are likely but are not monetised here. We limit our analysis to cost savings accessed by consumers finding better deals or moving onto cheaper, promoted tariffs.

We do not include analysis of monetised estimates of welfare benefits from consumers moving onto better bundles at the same price, for example moving from standard to superfast broadband. However, Ofcom suggests that 'many customers who were out of contract were paying more for a standard broadband bundle than they would if they took a new contract for a superfast service.' More extensive analysis is beyond the scope of this Impact Assessment, but it is likely that consumers would also benefit from quality improvements as well as financial savings from greater market engagement.

Furthermore, we also expect that consumers would benefit from financial savings in understanding their usage, which would be much easier with data portability in telecoms. Once people understand their usage, they are 'more likely to choose a tariff that suits their needs and gives them good value', as noted by Ofcom.

#### 4) Benefit to consumers: time savings through reduced search costs

Consumers and SMEs who were already switching providers prior to Open Communication will also benefit from time savings. Receiving their data in an accessible format improves individuals' comprehension and also makes Third Party comparison sites of greater use. This reduces the amount of time and effort consumers expend in using their data effectively, through lower search costs and time spent by both consumers and businesses. Primarily, these benefits may be felt by those that are already engaged in the market.

Using estimations from BEIS, an indication of the potential time saving benefits generated by Open Banking can be calculated using some assumptions. Assuming that 20 minutes of time can be saved for the 7 million current Open Banking users,<sup>164</sup> and valuing time between £4.54 and £13 an hour, this would result in benefits from time savings worth between £11 million and £30 million per year.<sup>165</sup>

As suggested in this earlier Impact Assessment, if Smart Data were implemented in telecoms, leading to increased yearly time savings to half an hour and increased the coverage of savings to every adult with a smartphone, this could be approximately a £271m benefit per annum. We consider this to be a good indicative estimate of the long-term benefits of Open Communications, but do not include this in the monetised benefits of the scheme at present due to uncertainty over the likely time savings by option.

Nonetheless, we think time savings for a large number of consumers is likely to be a positive benefit of this scheme. This is likely to result from the large array of new information, services, and applications offered by ongoing access to data to TPPs and for APIs. While these benefits will be primarily accrued by individuals that switch telecoms contracts, there may be benefits for other consumers in the forms of other applications and tools. Anecdotal evidence from midata indicates that there are potentially large benefits from time savings<sup>166</sup>, in terms of automating and accelerating tasks such as budgeting, price and service comparison, switching, form-filling.

This effect is likely to be much more pronounced in Option 3 rather than 2. In fact, simply offering consumer data in readable format will provide greater information to consumers, but may actually increase search costs and time taken to request, access and analyse. This process would likely be automated and packaged under Option 3 but not necessarily 2. **We therefore consider time savings for consumers to be a benefit of Option 3 but not Option 2.**

It is important to distinguish between consumers who were previously switching and those who begin switching for the first time. For already engaged consumers, Open Communications is likely to represent a time saving, simplifying the process that was already undertaken in the baseline scenario. For new switchers, Open Communications will require consumer time to access their data and provide this to a TPP, with more

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<sup>164</sup> See Open Banking [press release](#), February 2023

<sup>165</sup> BEIS (2020) [Regulatory Powers for Smart Data Initiatives](#)

<sup>166</sup> See for example, the midata (2012) [company briefing pack](#)

time for comparison of deals. However, as described above, this process results in a net benefit. Therefore, both prior switchers and new switchers benefit from the proposals, from time savings and financial savings respectively.

Consumer benefits estimated here are dependent on several key assumptions:

- Rates of consumer increased switching as a result of Open Communications legislation: a central conservative estimate of 5% increase in switching is used, taken from previous interventions and available evidence.
- Assumption that increase in switching takes three years to fully feed through, increasing linearly in years one and two.
- Proportion of customers out of contract: estimated to be 11% in mobile markets and 35% in broadband markets (both taken from Ofcom). We use these as the 'affected group' through increased switching, but in reality, a larger consumer base (such as those already in poorly suited contracts, or overpaying for inferior packages) may also benefit from Open Communications.
- Size of customer base, taken from Ofcom data in both mobile and broadband markets. The most recent data shows there were 27.5 million fixed broadband connections in 2020;<sup>167</sup> and 17.9 million bundled mobile contracts.<sup>168</sup>
- Size of the average loyalty penalty in both mobile (per-person monthly differential of £10.83) and broadband (per-person monthly differential of £5.10), taken from Ofcom and Citizens Advice analysis on each topic.
- Forecasts on total number of contracts, in mobile contracts (around 1% annual growth, in line with recent trends) and broadband contracts (around 1.8% annual growth, based on linear trends from 2013 to 2020).
- In mobile markets, we assume the proportion of customers on bundled (phone and SIM contracts will decrease over the next 10 years, in line with recent trends of bundled contract share falling 2% per year.

We conduct sensitivity analysis to alter the two key assumptions in the calculations, increase in consumer switching and proportion of customers who are out of contract (and therefore liable to face loyalty penalties)

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<sup>167</sup> Ofcom / operators (2021) [Open Data](#)

<sup>168</sup> Ofcom (2020) Pricing trends for communications services in the UK

**Table 8: Sensitivity - mobile consumer benefits: £m 10 year net present values under different assumptions**

		Low	Central	High
		2% switching	5% switching increase	10% switching increase
Low	5% out of contract	£7.56	£18.89	£37.78
Central	11% out of contract	£14.27	£35.67	£71.33
High	15% out of contract	£22.67	£56.68	£113.35

**Table 9: Sensitivity - broadband consumer benefits: £m 10 year net present values under different assumptions**

		Low	Central	High
		2% switching	5% switching increase	10% switching increase
Low	20% out of contract	£59.04	£147.59	£295.18
Central	35% out of contract	£103.31	£258.29	£516.57
High	50% out of contract	£147.59	£368.98	£737.96

## Wider impacts

There are wider and indirect impacts which may arise from the options for Open Communications. These impacts are enabled, influenced or indirectly caused by the regulatory changes.

These impacts are difficult to quantify at this stage, but we aim to identify potential impacts on markets of increased and improved data portability. These are approached from a qualitative perspective. For example, benefits are predictably expected to accrue from improved information in terms of greater transparency or better choice, but it is hard to monetise this with confidence. Likewise, increased access to data may enable innovation and competition, which will benefit third parties and feed through to consumers in improved services and specialisation. We first identify these impacts, using this as a starting point to analyse and monetise impacts in later appraisal.

## Consumer

Many consumer benefits of a data portability scheme are indirect, uncertain, and highly dependent on both the design of the scheme and the response from businesses, consumers and third parties. We are also mindful of the potential for double-counting benefits when separately monetising benefits from increased switching and other consumption benefits. Nonetheless, we think there are additional indirect benefits from data portability in telecoms.

### 1) Benefit to consumers: indirect consumption benefits

Aside from the primary direct benefit to end-users from Open Communications schemes as monetised cost savings, there are likely to be further benefits from being more engaged with the market. When consumers are better informed by data, they are able to make optimal decisions based on their needs, resulting in a reduction in market power and reallocating consumer surplus from suppliers to consumers.

There are also increased gains to society through improved offerings by existing or new entrants addressing previously unmet demand, thereby reducing deadweight loss. These different choices will result in benefits not captured by loyalty penalty estimates. For example, as an indication for what this looks like in an existing initiative – analysis of the Pensions Dashboard highlights the potential recovery of up to £19.4m of “lost” pension pots.

### 2) Benefit to consumers: improved security and fraud reduction



We may also see indirect consumer benefits in the form of reduced security and fraud. Smart Data schemes can reduce insecure practices such as screen scraping (the extraction of data from websites, typically using scraping software). Data portability removes the need for such practices, with data being provided more readily. In the case of Open Banking, that process has been largely eradicated. This may reduce both incidence of fraud and reduce time spent and costs for consumers related to identity fraud.

Data portability also reduces the need to resort to other less secure alternatives to accessing user data. Currently, many consumers may have to share their data – such as on their contract usage - by copying or exporting their data in digital format (such as Excel) or offline format (such as scans), both time consuming and potentially more susceptible to fraud than by using a designed, secure and consistent method. Open Communications may reduce reliance on these practices, saving both time and improving security.

### 3) Potential cost to consumers: improved security and fraud reduction,

As discussed in the above sections, Open Communications may result in costs to businesses. While we primarily identify costs in terms of where they directly fall, there is the possibility that some of these costs to suppliers might be passed on to consumers in the form of higher prices. This depends on the extent to which businesses pass through their costs to consumers.<sup>169</sup>

We do not attempt to monetise this impact here, due to a high degree of uncertainty. Given that the cost per customer is likely to be very low, due to the very large telecoms customer bases, we expect that the impact on consumers is likely to be small. Nonetheless, we are interested in developing this analysis with more detailed assumptions on precise costs and likely cost pass-through.

## Distributional and equalities benefits

There are also potentially large distributional benefits, in improving outcomes for vulnerable customers and increasing equality. As previously noted, consumer issues in telecoms may be particularly felt by vulnerable groups, who may be more susceptible to low market engagement and loyalty penalties. We have also identified that spending on telecoms products constitutes a larger proportion of household expenditure for lower income decile groups. We therefore expect vulnerable and lower income individuals to be potentially large beneficiaries of data portability.

Citizens Advice finds that vulnerable consumers, typically elderly and low-income households, are especially at risk of paying the loyalty penalty. Vulnerable consumers are found to pay a slightly lower price differential than the average for all out-of-contract customers (£2.30 compared to £5.10 as above<sup>170</sup>) but this still represents a substantial reduction to disposable incomes. We therefore believe that Open Communications could potentially increase market engagement and help address some of these issues. If similar tools were created in telecoms as have been seen in Open Banking, such as budgeting tools, deal comparison and aggregated consumer data dashboards, these are likely to be especially valuable to disengaged, often vulnerable groups, leveraging data to provide services aimed at tackling vulnerability.

Citizens Advice has suggested that improved data mobility may ensure vulnerable customers receive more consistent support, and should 'encourage engagement from more consumers in vulnerable situations'.<sup>171</sup> The Open Data Institute (ODI) has also argued that effective data portability could help address some of the distributional issues of the UK's 'digital divide'. The ODI notes that data portability can support the development of a competitive ecosystem and 'help ensure consumers in vulnerable circumstances are not 'locked in' to unfavourable deals'.<sup>172</sup>

If Open Communications successfully drives competition, innovation and customer engagement, in the telecoms market, this is likely to reduce the opportunity and prevalence of discriminatory pricing and misallocation of products. With more transparent markets and engaged shoppers, rather than individuals reluctant and unable to change products, more individuals are likely to access fair and appropriate deals for telecoms products. These benefits are particularly important for lower income groups and vulnerable

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<sup>169</sup> RBB Economics (2014) [Cost pass-through: theory, measurement, and potential policy implications](#)

<sup>170</sup> Ofcom (2021): Telecoms customers saving millions as Ofcom rules bed in

<sup>171</sup> Citizens Advice (2020) [response to Open Communications proposals](#)

<sup>172</sup> ODI (2020) [Benefitting fairly from data](#)



customers. As a result, there are many potential long-term benefits in terms of improved outcomes for vulnerable people and improved equality, such as for those with protected characteristics.

## Competition

As outlined in the problem statement, competition is vital within many digital markets, particularly telecoms. Telecoms goods and services are now fundamental consumer necessities, meaning healthy competition on product and price are pivotal to ensuring fair outcomes for consumers and ensuring a dynamic market. Nonetheless, telecoms competition could be improved and is being closely monitored by the government and the regulator.

According to the CMA's 2020 State of Competition report, mobile telephone services and internet services are the third and fourth-worst ranking service sub-sectors, scoring well below average on measures of comparability, choice and trust.<sup>173</sup> In recent months, the CMA has also identified potential competition issues with limited suppliers of mobile operators, whereby less competition could mean higher prices or worse terms for both mobile operators and their customers.<sup>174</sup>

Partially, this may be attributed to low levels of competition reducing choice, innovation and variety for consumers, related to barriers to switching or suboptimal deals. Easier switching, and improved access to user data may address these challenges, lowering barriers to both moving providers and for new market entrants. Data portability therefore benefits incumbent telecom providers through spurring innovation and competition. Given increased access to data, there are increased incentives to personalise services and lower barriers to switching. Access to data and increased competition for relevant services is likely to benefit both businesses and consumers. Furthermore, the increased competition from switching pressure will also likely positively impact those who don't even switch, through price competition and/or lower price rises.

We expect there may be potential impacts on competition of data portability. Theoretically, data portability may drive benefits through greater competition through reduction of societal 'deadweight loss': with greater information, consumers make better decisions as they are more able to recognise their true willingness to pay for goods and services; through clearer information, consumers can compare different services and more accurately observe their true demand for those products. This may reallocate surplus from suppliers to consumers, and lead to social gains through previously unmet demand being addressed by improved offerings by existing or new entrants.

Research indicates that data portability impacts competition among online platforms in markets with high value for personalisation and value of use data. In industries with high degrees of competition, such as online music streaming for example, providers are spurred by the consequences of user mobility due to data portability which can increase data-driven innovation, investment and ultimately improve user engagement and retention. This competition benefits both businesses and users.<sup>175</sup>

While we do not attempt to quantify this impact, we consider that competition benefits are a potential long-term impact of Open Communications. This is dependent on the entry of new market participants, driving increased competition, and may therefore take place in the medium to long-term.

## Innovation

The evidence from Open Banking and other initiatives suggests that improved data portability leads to increased competition, innovation around customer experience and an explosion in new services which benefits both new market entrants and incumbent providers. In Open Banking, this led to increased platforms and applications, signalling greater levels of competition and lower market barriers - the number of API calls increased from 66.8 million in 2018 to 1 billion calls per month in 2022 - making user-friendly banking technology accessible to millions more people.<sup>176</sup> Open Banking has enabled a consent-based ecosystem,

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<sup>173</sup> CMA (2020) [State of Competition 2020 report](#)

<sup>174</sup> See [CMA \(2021\)](#) which provisionally found Cellnex's proposed purchase of CK Hutchison's towers would harm competition

<sup>175</sup> Ramos & Blind (2020) [Data portability effects on data-driven innovation of online platforms: Analyzing Spotify](#)

<sup>176</sup> Open Banking (2022) <https://www.openbanking.org.uk/news/the-obie-marks-completion-of-cma-open-banking-roadmap-on-fifth-anniversary/>

where a customer's data is shared with a third party only if they want that third party's help. There is evidence that this has driven higher trust and satisfaction across the sector.<sup>177</sup>

In telecoms, the exact new services and innovation that could be realised by improved portability is uncertain, but new potential services may include: automatic switching services that enable consumers to set their preferences and let the service switch them automatically if a better deal appears; advanced comparison tools allow consumers to find the best deal based on factors such as historical usage, location or service quality; bundle management services to help consumers understand what parts of their bundles they use, whether they are paying for elements they are not using, and the alternatives.<sup>178</sup>

## Trade

There may also be benefits in terms of trade and investment resulting from Open Communications. As noted in BEIS Smart Data Impact Assessment, data portability may result in benefits to the UK tech ecosystem, leading to trade or investment.<sup>179</sup>

This may be driven by the opportunity for foreign direct investment into new enterprises enabled by Open Communications. Secondly, by creating clear pro-innovation regulation, a Smart Data scheme could help to establish and maintain the UK as a leader in data portability, supporting trade. This will be explored further in future engagement, once the scope, data to be collected and sharing approach have been established.

## Public sector

### 1) Benefit to the public sector: easier access to better quality data

The creation by third parties of new databases in line with the Open Communications scheme may spur the creation of datasets containing high quality standardised data available for use by the public sector, benefitting research and policymaking. Merging, cleaning and standardising data sets is usually a costly procedure for academia and government, yet the scheme should increase both the quality and quantity of data available to create new datasets for research.

Such a benefit has been seen within Open Banking,<sup>180</sup> wherein the University of Edinburgh has collaborated with the Financial Data and Technology Association to provide detailed insights into the financial impact of economic shocks. Their "Global Economic Observatory" project merges digital accountancy software data with Open Banking data to estimate the impact of shocks to the financial economy. The collaboration uses real financial data for 'social good', such that governments and other institutions may make more timely, accurate and data-driven economic decisions.

### 2) Benefit to the public sector: reduced regulatory burden through competition and innovation

The midata impact assessment<sup>181</sup> highlights that confident consumers with enhanced decision-making powers can significantly impact the competitiveness of an economy, driving competition, innovation and ultimately long-term economic growth. We expect data portability to lead to an increase in the number of engaged consumers in the market, enabling better decision-making and greater understanding of the range of deals on offer.

Increased competition will give transparent, open firms an edge<sup>182</sup>, boost innovation and investment, improve the products and services on offer whilst keeping prices competitive. This limits the need for intervention in the market, thereby reducing the regulatory burden of the public sector. In addition to this, economic theory states that competition delivers higher allocative efficiency (i.e. higher output) than regulation, and competition

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<sup>177</sup> Johnston (2021) [Open For Business: How Open Banking Is Driving Competition Around Customer Experience](#)

<sup>178</sup> [Open Banking Impact Report \(2020\)](#)

<sup>179</sup> BEIS (2020) [Regulatory Powers for Smart Data Initiatives](#)

<sup>180</sup> Government Computing (2020) [GOFCoE fintech hub in Edinburgh secures £22.5m funding from UKRI](#)

<sup>181</sup> Department for Business, Innovation and Skills (2012): [Midata Impact Assessment](#)

<sup>182</sup> This has been suggested as a likely outcome by Nobel Prize winning economist Richard Thaler.

is better suited to deal with information asymmetries in the market<sup>183</sup>. Therefore competition is able to further reduce asymmetric information and improve market efficiency.

## 4. Risks and assumptions

There are a number of potential risks and sensitivities around this assessment. Firstly, underestimating the costs to business. We have highlighted the key costs relevant to Open Communications in section 3, based on evidence from several key pieces of analysis. However responses to the Ofcom consultation<sup>184</sup> highlighted a series of costs not considered by Ofcom at the time. Some of these additional cost categories have been captured within this assessment, but the following have been excluded due to a lack of evidence:

- Data development
- Data quality testing and management
- Putting services into production
- Reliability requirements
- Oversight expenditure
- Ofcom's governing, monitoring and enforcement costs
- Setting up of a data trustee

Despite the lack of evidence to support these cost claims, there remains the risk that such cost categories and others may be underestimated. Similarly, there are potential risks surrounding costs of implementing and monitoring the scheme. We do not detail the implementation of the preferred option at this stage, but it is a central consideration in terms of the body responsible for designing and implementing any future scheme. We aim to seek input on the analysis presented here at later consultation.

There exists potential risks to people who share data about their services with third parties, for example with respect to data security. Mitigations for this will need to consider the type of data shared, the sharing approach, as well as the scheme administration, and will be presented at Final Stage. This may impact the consumer take-up of the scheme, which links to the assumptions made in this assessment about the impact of legislation on consumers. This assessment does not account for consumers' learning over time, nor the interaction of this scheme with other regulations designed to target switching rates, such as end-of-contract notice periods. These have not been included in this assessment as they require evidence over an extended period of time. The estimation of the magnitude of benefits to this scheme may be impacted by such assumptions.

Secondly, by the nature of the consultation process, at which stage we are seeking further information and clarification of the scheme, there is uncertainty around the estimates presented here. This analysis is intended as a starting point, in order to improve assumptions and gain evidence on the monetised impacts.

While the 2023 DSIT Open Communications Consultation requests input on the potential design of legislation, a later consultation will test and gain input on all inputs and assumptions in this impact Assessment.

## 5. Impact on small and micro businesses

We expect that the majority of costs of ongoing compliance, familiarisation and funding will fall upon large and established businesses. By nature of the reforms and the markets, providers with large amounts of user data tend to be large industry incumbents. Although the majority of all telecoms businesses are small and micro sized, we expect that businesses that are most affected will be medium and large providers, as larger data controllers.

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<sup>183</sup> Guerriero (2010) [When is regulation more efficient than competition?](#)

<sup>184</sup> Ofcom (2021) [Update on Open Communications: Enabling people to share data with innovative services](#)

In the Open Communications consultation, the Government is proposing that all telecoms providers that provide residential and personal mobile services are in scope of Open Communications data sharing requirements. This is to ensure that there is no two-tier system in the market, where some customers can access their data, whilst others cannot.

The Government also wants consumers to be able to see the range of services available across the market. We believe that Open Comms will also help small and micro telecoms businesses, by increasing their visibility in the market, which would help bring in new customers through the Open Communications scheme.

The Government has asked for views on whether all telecoms businesses providing residential broadband and personal mobile services should be in scope, and will take into account responses and further data when determining the final scope of data sharing requirements. The Government has also requested views on how the impacts on businesses may vary depending on firm size.

**Table 10: Telecoms enterprises by industry and employment size band, 2021**

Industry	Total	Micro (0 to 9)	Small (10 to 49)	Medium (50 to 249)	Large (250+)
Telecommunications <sup>185</sup>	8,445	7,495	695	195	55
Of which: Wired telecommunications activities	1,675	1,555	95	20	5
Of which: Wireless telecommunications activities	1,540	1,395	110	25	5
Of which: Satellite telecommunications activities	165	135	20	10	0
Of which: Other telecommunications activities	5,065	4,410	470	145	45

Source: UK Business Population Estimates<sup>186</sup>

### Small and Micro Businesses as providers

It is important to consider the role of small and micro businesses as providers and third parties within this market. Responses to Ofcom's<sup>187</sup> 2020 consultation highlighted the risk that the costs may fall differently among providers, with smaller providers facing a higher cost burden. In particular, Zzoomm considered the ability of smaller providers to comply with highly complex requirements alongside the current investments being undertaken to comply with the European Electronic Communications Code. Similarly, the FCS noted that as a scheme, Open Communications would be likely expensive and onerous for all providers, but especially true for smaller network providers.

### Small and Micro Businesses as consumers

Such businesses are also customers of telecoms products, and are therefore able to benefit from many of the upsides of Open Communications. Particularly in terms of new applications and tools, small businesses may be the primary recipient and beneficiary of new services. This has been seen in the case of Open Banking whereby new financial and banking applications have been created in the small business market.

We will seek further input at a later consultation stage of Open Communications proposals as to the likely impacts of the scheme on small and micro businesses. At Final Stage, we will offer a full implementation plan of the preferred option, including any provisions or exemptions for small and micro businesses.

<sup>185</sup> As defined by Standard Industry Classification (SIC) codes for telecommunications, 61

<sup>186</sup> Downloaded from Nomis (2022) [UK Business Counts - enterprises by industry and employment size band](#)

<sup>187</sup> Ofcom (2021) Update on Open Communications: Enabling people to share data with innovative services

Ofcom's Open Communications consultation<sup>188</sup> outlined that the scheme could help smaller providers grow and compete. This may occur due to improved opportunities to compete along non-price factors (such as reliability, customer services, service speed), and could raise awareness of smaller businesses, and their attributes through comparison tools. Ofcom's SME Communication Needs report<sup>189</sup> finds that when SMEs have switched to smaller providers, they tend to have increased satisfaction, suggesting value in moving away from the major consumer brands.

## 6. Monitoring and Evaluation

Full details of the Monitoring and Evaluation strategy of the initiative will be provided at final stage. At this stage, we outline the main facets and objectives of the scheme.

### Objectives

Open Communications aims to enable consumers to securely access and share their data with third parties, through Smart Data powers.

The scheme seeks to:

- Improve consumer knowledge on their usage and different telecoms products and services
- Reduce frictions to sharing data
- Increase consumer engagement, trust and satisfaction
- Increase competition and innovation in telecoms markets through access to data

Consequently, we expect these factors to increase switching rates and lower the loyalty penalty, increase new services and applications in telecoms, and increase business investment and formation.

We intend to use key metrics to assess the scheme, using data provided by Ofcom's Open Data portal<sup>190</sup>, which include churn, number of consumers on different contract types, and those out of contract. However we should note that the scheme is still under development, and as such better indicators and sources of information should be identified at a later stage.

The key current uncertainties of the intervention relate to the precise implementation and subsequent costs to business. We therefore intend to continue to monitor costs of the scheme, through further policy development, analysis on businesses affected and marginal impacts.

Following implementation, we intend to undertake evaluation through tracking and monitoring of the key metrics, in order to assess whether the intervention is creating desired results: Monitoring may include:

- The size and prevalence of the loyalty penalty in telecoms markets. Both Ofcom and Citizens Advice regularly report on consumer expenditure and out-of-contract proportions in telecoms.<sup>191</sup>
- Assessing switching rates in telecoms, by market and
- Consumer satisfaction rates by market, according to different metrics, including the UK Customer Satisfaction Index (UKCSI)
- Metrics of Innovation: business formation and qualitative summaries of new services in key markets
- Qualitative reviews of innovation and new services derived from Open Communications. It should be direct and transparent to ascertain the new services and tools enabled by the initiative, and an evaluation of these new services over time would illustrate such innovation.<sup>192</sup>

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<sup>188</sup> Ofcom (August 2020) "[Open Communications: Enabling people to share data with innovative services](#)"

<sup>189</sup> Ofcom (2018) [SMEs Communication Needs](#)

<sup>190</sup> Ofcom [Open Data Portal](#)

<sup>191</sup> Such as Ofcom (2020) [Helping consumers get better deals: Review of pricing practices in fixed broadband](#), which they intend to continue producing and will serve as a baseline for future monitoring

<sup>192</sup> For example, looking at Open Banking: as of December 2020 there were almost 300 regulated providers with over 102 with a live customer. There is evidence these applications have strong uptake, with around 5.8 billion API calls and more than 4 million payments made in 2020. As seen in Open Banking (2021) [Three years since PSD2 marked the start of Open Banking, the UK has built a world-leading ecosystem](#)

A Post Implementation Review (PIR) would also be planned within five years of legislation, in order to evaluate the implementation of the scheme and whether project objectives were met. Further details of this, including the resourcing and any budget requirements, will be developed and presented at Final Stage.