Report for the Phone-paid Services Authority

Annual market review for phone-paid services 2020–2021

September 2021

RESEARCH

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1. Executive summary

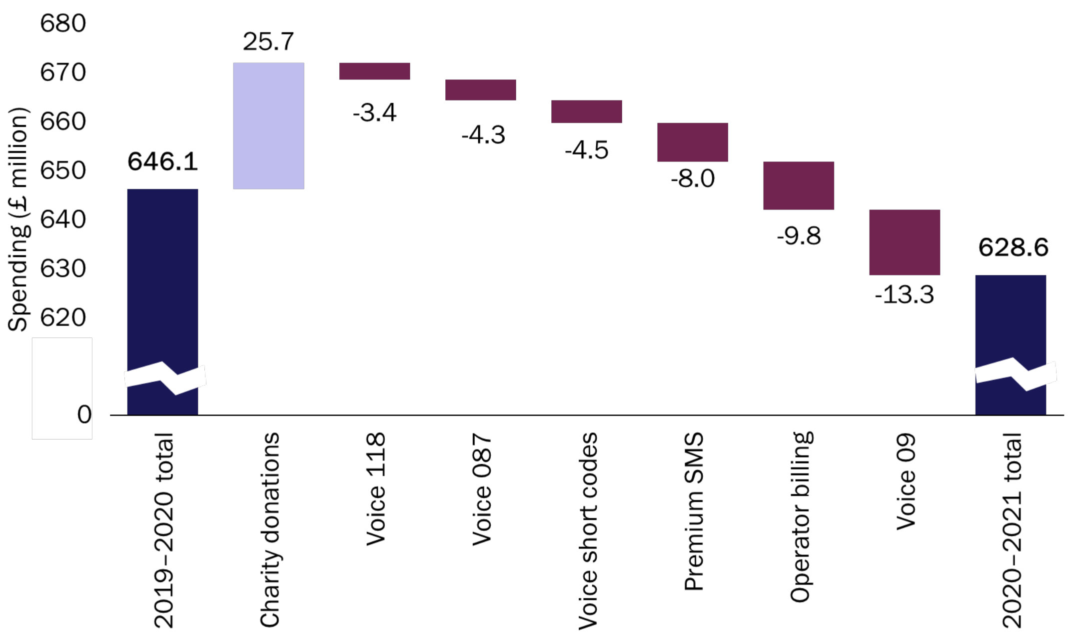
This report is the annual review of the phone-paid services market for 2020–2021,[1] prepared by Analysys Mason on behalf of the Phone-paid Services Authority. It provides an overview of the size of the phone-paid services market in the UK for 2020–2021 and a discussion of the key market drivers, as well as an outlook for the market until 2023–2024. The report draws upon a survey of 9274 consumers that was conducted between March and April 2021, in which respondents were asked about their use and perception of phone-paid services. This report also includes quantitative modelling of market demand alongside insights from in-depth interviews with 17 industry participants from across the value chain. Significantly, this report outlines how these key industry players believe that the COVID-19 pandemic will have affected their businesses.

Consumers in the UK spent £628.6 million (excluding VAT) on phone-paid services in 2020–2021, which represents a 2.7% decline in spending from £646.1 million in 2019–2020.[2] As shown on Figure 1.1, the only channel to generate a net increase in consumer spending was charity donations (+£25.7 million). Consumer spending on services using premium SMS unexpectedly incurred a net decline year-on-year (which had not occurred since 2017–2018), as did that on operator billing. Less surprisingly, voice-based services delivered via voice short codes, voice 087, voice 09 and voice 118 have continued to fall in popularity and use and once again, the consumer spending on these services was lower than in the previous year.

1 The 2020–2021 date range refers to the Phone-paid Services Authority's 2020–2021 fiscal year, which runs from 1 April 2020 to 31 March 2021 (also referred to as 'the past 12 months' in this report). The 2021–2022 fiscal year should be understood as the period that runs from 1 April 2021 to 31 March 2022 (also referred to as 'the next 12 months' in this report). The same terminology applies to 2022–2023 and 2023–2024.

2 Phone-paid Services Authority (August 2020), *Annual Market Review 2019–2020*. Available at: https://psauthority.org.uk/-/media/Files/PSA/00NEW-website/Research-and-consultations/Research/PSA-annual-market-review-2019-2020.pdf?la=en&hash=5260383A6BDD1260F768465F5FBB4E08AAAC3FAE.

Figure 1.1: Change in end-user spending (excluding VAT) between 2019–2020 and 2020–2021, by spending channel, UK[3]



Source: Analysys Mason and Phone-paid Services Authority, 2021

The following are the main trends within the key service categories that make up each spending channel.

- Charity donations increased between 2019–2020 and 2020–2021, despite the postponement of televised telethon events (such as Stand Up To Cancer and Soccer Aid) during the pandemic. The BBC's Big Night In and significant charity campaigns (such as those for the NHS) attracted additional donations.
- The decline in spending on operator billing is due to a combination of factors (Figure 1.2). The popularity of entertainment services offered by large OTT providers continued to grow year-on-year and usage increased as individuals spent more time indoors during lockdown periods, resulting in an increase in spending. The introduction of a new operator billing agreement between Three and Apple in December 2020 also led to growth in spending on operator billing. However, these gains were outweighed by the decline in spending caused by the significant fall in the number of users and individual use of subscription-based services, primarily due to the extension of special conditions from select subscription services to all subscription services from November 2019 onwards. These special conditions include additional steps for consumers when signing up to subscription services and a requirement for service providers to be more transparent about the amount being charged. They are likely to have significantly reduced the number of impulsive and unintended purchases, a key driver of phone-paid service purchases.
- Competitions run by TV and radio broadcasters that use premium SMS continued to be popular among consumers (and were boosted by lockdowns to some extent), but the growth in spending in this category has

3 Note that the numbers in figures in this report are rounded, so totals may not appear to be equal to the sum of market segments. This chart shows the total spend in 2019–2020 on the left-most bar and the total spend in 2020–2021 on the right-most bar. Bars in between show the growth (in light purple) or decline (in dark red) by spending channel (for example, charity donations increased by £25.7 million between 2019–2020 and 2020–2021).

started to slow down because the segment is approaching maturity (Figure 1.3). The growth in spending on TV and radio engagement between 2019–2020 and 2020–2021 was insufficient to offset a significant decline in spending on most other premium SMS services, many of which use a subscription model and were thus impacted by the extension of special conditions to all subscription services (mentioned above).

- Spending on voice-based services that use short codes or the 09, 087, 118 numbering ranges declined in line with long-term trends, despite the short-term spike in spending on voice 09 services in 2019–2020. Both users and service providers are moving to cheaper or online alternatives, and this trend has been accelerated by lockdowns because many traditional users are likely to have been informed of alternatives by more tech-savvy family members who are now spending more time at home.

Figure 1.2: End-user spending (excluding VAT) via operator billing, by service category, UK, 2019–2020 and 2020–2021[4]

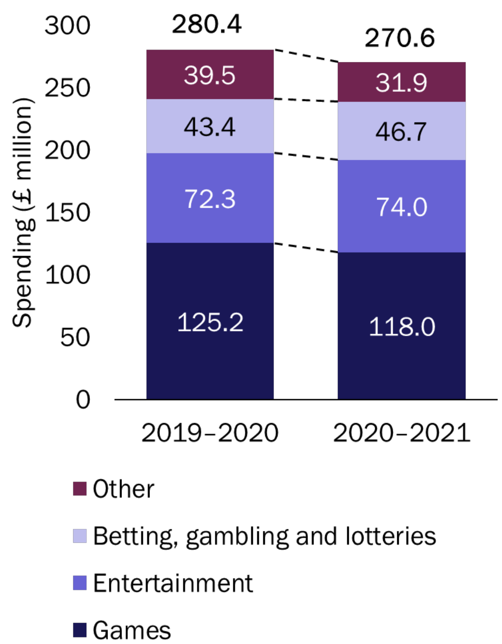
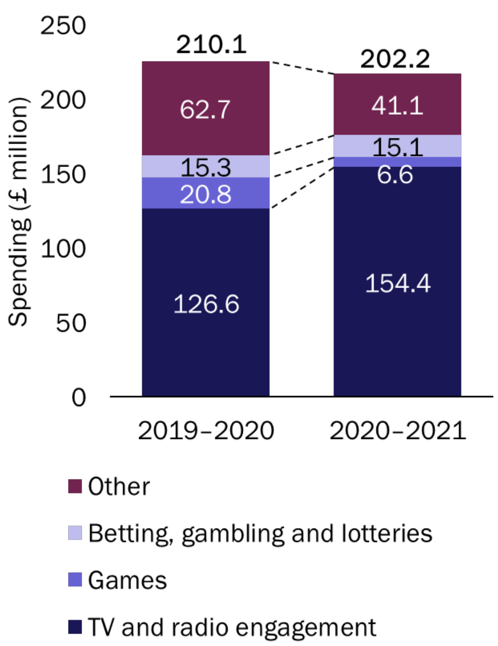


Figure 1.3: End-user spending (excluding VAT) via premium SMS, by service category, UK, 2019–2020 and 2020–2021[5]



Source: Analysys Mason and Phone-paid Services Authority, 2021

We have compared the forecast produced for the 2019–2020 annual market review with the actual data collected this year. Figure 1.4 shows that the most significant differences between the forecast and the actual data were in the premium SMS, operator billing and charities categories; differences for voice 118, voice 087 and voice 09 services were somewhat more marginal.

4 'Other' includes the remaining eight service categories: competitions and quizzes; device personalisation and security; digital payments; information, news and education; lifestyle; personal and relationship services; sexual entertainment and TV and radio engagement. No single category in 'Other' is estimated to have generated 10% or more of the total channel revenue.

5 'Other' includes the remaining eight service categories: competitions and quizzes; device personalisation and security; digital payments; entertainment; information, news and education; lifestyle; personal and relationship services and sexual entertainment. No single category in 'Other' is estimated to have generated 10% or more of the total channel revenue.

Figure 1.4: Comparison of our forecast results for consumer spending on phone-paid services with the actual spending, UK, 2020–2021

Payment channel	Forecast change in spending	Actual change in spending	Comments
Premium SMS	+£8.7 million (+4.2%)	–£8.0 million (–3.8%)	We expected that spending on competitions run by TV channels and broadcasters would continue to grow, but we did not anticipate that the new special conditions for subscription services (introduced in November 2019) would have such a significant impact on the market. We believed that their effect would be primarily felt in the first few months after the introduction and that they would be much less prevalent by the start of 2020–2021.
Operator billing	+£12.0 million (+4.3%)	–£9.8 million (–3.5%)	As expected, many entertainment and games services benefitted from increased usage during lockdown. Spending on gambling, betting and lotteries also increased, which we had anticipated. As with premium SMS, the expanded special conditions had a much more significant adverse effect on the overall operator billing segment in 2020–2021 than initially expected.
Charity donations	+£7.8 million (+19.5%)	+£25.7 million (+64.1%)	Our forecast last year correctly predicted that the traditional seasonality of the phone-paid charity segment was likely to result in an increase in spending in 2020–2021, but it also anticipated that the COVID-19 pandemic would limit the range of activities that fundraisers could organise considerably. Some televised telethon events were indeed postponed (such as Stand Up To Cancer and Soccer Aid), but a one-off replacement telethon (the BBC's Big Night In) and other campaigns (such as those for the NHS) attracted significant donations, which contributed to a higher amount than initially expected.
Voice 09	–£8.7 million (–13.3%)	–£13.3 million (–20.4%)	As expected, spending on all voice-based services continued to decline in 2020–2021, though to a greater extent than anticipated due to the COVID-19 pandemic and its acceleration of the shift towards online services.
Voice short codes	–£2.1 million (–12.3%)	–£4.5 million (–26.6%)	
Voice 087	–£2.9 million (–13.6%)	–£4.3 million (–19.8%)	
Voice 118	–£3.6 million (–31.2%)	–£3.4 million (–29.3%)	Spending declined roughly as predicted.

Source: Analysys Mason, 2021

The phone-paid services market is expected to decline by 4.6% between 2020–2021 and 2021–2022 to £599.5 million (Figure 1.5). Many of the legacy trends in the market will have been and will continue to be exacerbated by the pandemic and the overall challenging macroeconomic conditions.

- Spending via operator billing will decline, primarily caused by a slight decline in spending on games and entertainment services. Use of video streaming platforms is expected to decline, as is the number of games downloaded from app stores following the end of lockdowns; a portion of individuals who signed up for these services in the last year are likely to cancel them with alternative activities now available again. A new agreement between Three and Apple, concluded in December 2020, will increase the size of the addressable market, but the impact of this will be limited in 2021 due to limited awareness. Spending on gambling services will increase due to the end of lockdowns, and more sports betting will be available than in 2020–2021.

- Spending via the premium SMS channel is projected to decline slightly. Growth in the TV and radio engagement category will be limited because TV and radio audiences will be less 'captive' in 2021-2022 as the UK lockdown restrictions have eased. As a result, broadcasters will see slower growth in engagement and competition revenue than in the last few years. Subscription services will continue to decline, for similar reasons as in 2020-2021. Spending on other services in this segment will generally fall as service providers move online and provide other payment options.

- Spending on charity donations is expected to be lower in 2021–2022, simply due to the seasonality of major telethon events. Many of these events were limited by filming restrictions or delayed during the pandemic, but the BBC's Big Night In filled this gap. Next year will see a return to the regular telethon schedule, which usually means a 'down' year in terms of telethon donations.

- End-user spending on voice-based services (including voice 09, voice 087, voice 118 and voice short codes) will continue to decline because the core user base of these services found alternatives during 2020–2021. Both users and services are migrating online or to cheaper alternatives, so there is no reason to return to premium-rate voice and the use of these payment mechanisms will not increase after the pandemic. However, the rate of the decline is likely to be slower than it was during 2020–2021. Voice 09 services will remain the most stable, with only a slight decline. Some new players are entering the market, and a loyal base of core users limit the scale of decline in this payment mechanism.

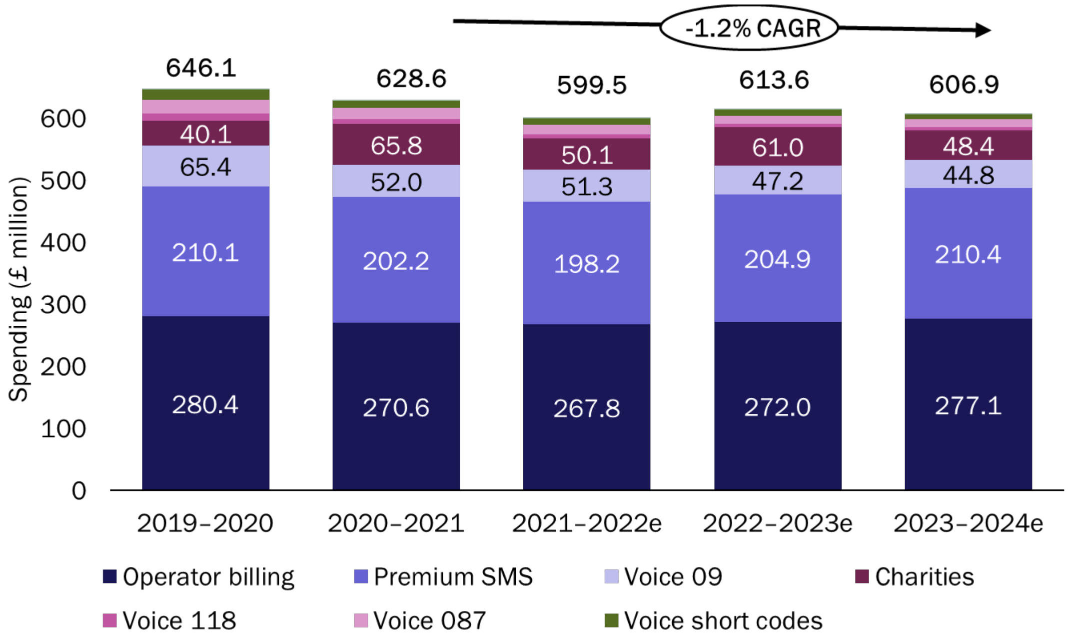
Figure 1.5: Forecast change in end-user spending (excluding VAT) between 2020–2021 and 2021–2022, by spending channel, UK[6]

6 This chart shows the total spend in 2020–2021 on the left-most bar and total forecast spend in 2021–2022 on the right-most bar. Bars in between show growth (in light purple) or decline (in dark red) by spending channel (for example, spending on operator billing is expected to increase by £11.3 million between 2020–2021 and 2021–2022).

Source: Analysys Mason and Phone-paid Services Authority, 2021

We expect that the phone-paid services market will return to growth in 2022–2023; it will grow by 3.2% to reach £618.7 million (Figure 1.6). We forecast that there will be some recovery from the challenging conditions in 2021–2022. Indeed, the declines in spending on legacy, voice-based services will be outweighed by growth in spending via operator billing and premium SMS. Spending on key services including TV and radio engagement, games, entertainment, betting, gambling and lotteries services will grow slightly during the forecast period. The overall market will remain relatively stable throughout the forecast period; the seasonality of charity donations (due to telethon events) will cause the largest changes year-on-year.

Figure 1.6: End-user spending (excluding VAT), by spending channel, UK, 2019–2020 to 2023–2024e (estimated)



Source: Analysys Mason and Phone-paid Services Authority, 2021

Our survey of consumers in the UK implied that 54% of the British population aged 16 or above used phone-paid services in 2020–2021. The drivers of phone-paid service use were similar to those identified last year: convenience was the most important driver, followed by impulse purchasing and affordability. 25% of users reported having had problems with phone-paid services in 2020–2021; difficulties when accessing or using the service were the most cited types of problem. Both the scale and the nature of problems reported were broadly consistent with what we observed last year: problems were most likely to occur when using sexual entertainment, personal and relationship services and connection services.

2. Introduction

This report is the annual review of the phone-paid services market for 2020–2021,[7] prepared by Analysys Mason on behalf of the Phone-paid Services Authority. It provides an overview of the size of the phone-paid services market in the UK for 2020–2021, a discussion of the key market drivers, an outlook of the market for 2021–2022 and a forecast of consumer spending up to 2023–2024. The report aims to assist the Phone-paid Services Authority with planning and policy-making activities and to provide insights into the current and future development of the market for existing and prospective industry participants.

This report is underpinned by quantitative modelling of the market and primary and desktop research.

- We reviewed previous studies published by the Phone-paid Services Authority, as well as other relevant literature, to improve our understanding of the phone-paid services market. This includes learning about individual services, spending channels and price points and regulatory decisions and key developments that may have affected the market in 2020–2021.
- We conducted a consumer survey of a nationally representative sample of 9274 individuals.[8] This survey captured information from those aged 16 and above regarding their usage of phone-paid services (for example, types of services used, spending channels, frequency of use and spending levels). The survey also helped to identify the key underlying factors that affect usage and overall satisfaction (such as preferences, issues and levels of trust).
- We conducted in-depth interviews with executives in senior positions across 17 organisations across the phone-paid services value chain (referred to as 'industry participants'), including mobile operators, fixed-line operators, intermediaries, Level 1 providers[9] and Level 2 providers.[10]
- We used information from the consumer survey and interviews to validate our understanding of the main market developments over the past 12 months, to provide evidence for our modelling assumptions and to produce a clear picture of the state and size of the market in 2020–2021 and its outlook for up to 2023–2024. We have also critically assessed our own market review from last year; we have determined the reasons for inaccuracies in our previous market modelling and have identified the most useful elements of our survey. This year's report builds on this cumulative knowledge and, as a result, we expect that the

7 2020–2021 refers to the Phone-paid Services Authority's 2020–2021 fiscal year, which runs from 1 April 2020 to 31 March 2021 (also referred to as 'the past 12 months' in the text). The 2021–2022 fiscal year should be understood as the period that runs from 1 April 2021 to 31 March 2022 (also referred to as 'the next 12 months' in the text). The same terminology applies for 2022–2023 and 2023–2024.

8 Field work for the consumer survey was conducted by market research company Lucid between March and April 2021.

9 A Level 1 provider is an organisation that provides a platform that, through arrangements with a network operator or another Level 1 provider, enables a phone-paid service to be accessed by a consumer. A Level 1 provider also offers other technical services that facilitate the provision of a phone-paid service.

10 A Level 2 provider is an organisation that controls or is responsible for the operation, content and promotion of a phone-paid service and/or the use of a facility within a phone-paid service.

information presented here is more accurate.[11] More detail on our modelling methodology can be found in Annex B.

The remainder of this document is laid out as follows.

- Section 3 gives an overview of the size of the phone-paid services market in 2020–2021, split by spending channel and by service category.
- Section 4 provides an analysis of the key factors that have influenced the growth of the market over the past 12 months.
- Section 5 discusses the potential outlook for the market in 2021–2022.
- Section 6 comments on our expectations regarding the evolution of the market up to 2023–2024.
- Section 7 examines the typical profile of phone-paid service users in more detail and highlights the key issues affecting their service usage.

The report includes two annexes containing supplementary material.

- Annex A contains a taxonomy of the phone-paid services analysed in this market review, as well as additional market data, arranged by service category and service type.
- Annex B provides further details on our market sizing methodology.

11 The consequences of the COVID-19 pandemic on the broader consumer spend remain difficult to predict at the time of writing. Our forecast of spending on phone-paid services up to 2023–2024 was developed on the basis of assumptions that we believe to be reasonable and that are supported by evidence from interviews with players in the phone-paid services industry, but it carries a greater degree of uncertainty than in normal circumstances as a result.

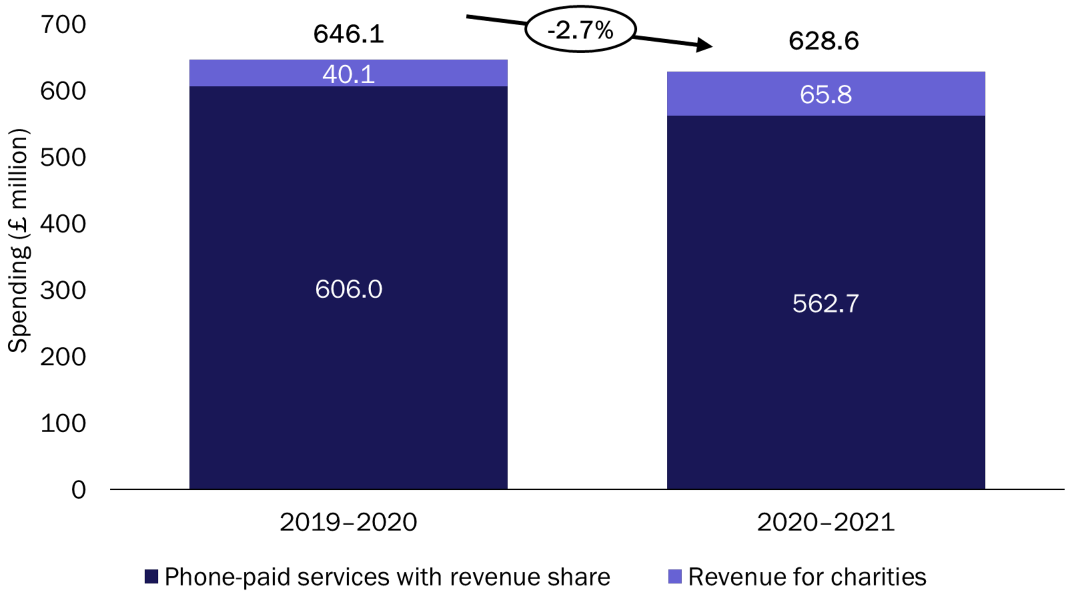
3. Size of the phone-paid services market in 2020–2021

Consumers in the UK spent £628.6 million (excluding VAT) on phone-paid services in 2020–2021, which represents a 2.7% decline in spending from £646.1 million in 2019–2020. Consumer spending on services using premium SMS unexpectedly incurred a net decline year-on-year (which had not occurred since 2017–2018), as did that on operator billing. Less surprisingly, voice-based services delivered via voice short codes, voice 087, voice 09 and voice 118 have continued to fall in popularity and use and once again, the consumer spending on these services was lower than in the previous year. Charity donations was the only channel to generate a net increase in consumer spending (+£25.7 million).

3.1 Overall market size

Consumers in the UK spent £628.6 million on phone-paid services in 2020–2021 (–2.7% year-on-year). £562.7 million of this was revenue generated by the phone-paid services industry itself (–7.1% year-on-year); this is the second lowest revenue achieved over the past 5 years (only above the £503.0 million captured in 2017–2018). A record £65.8 million was raised by charities (+63.6% year-on-year) via premium SMS and operator billing, as shown in Figure 3.1, which reduced the overall decline in consumer spending.

Figure 3.1: End-user spending (excluding VAT) on phone-paid services, UK, 2019–2020 and 2020–2021[12]



Source: Phone-paid Services Authority, 2021

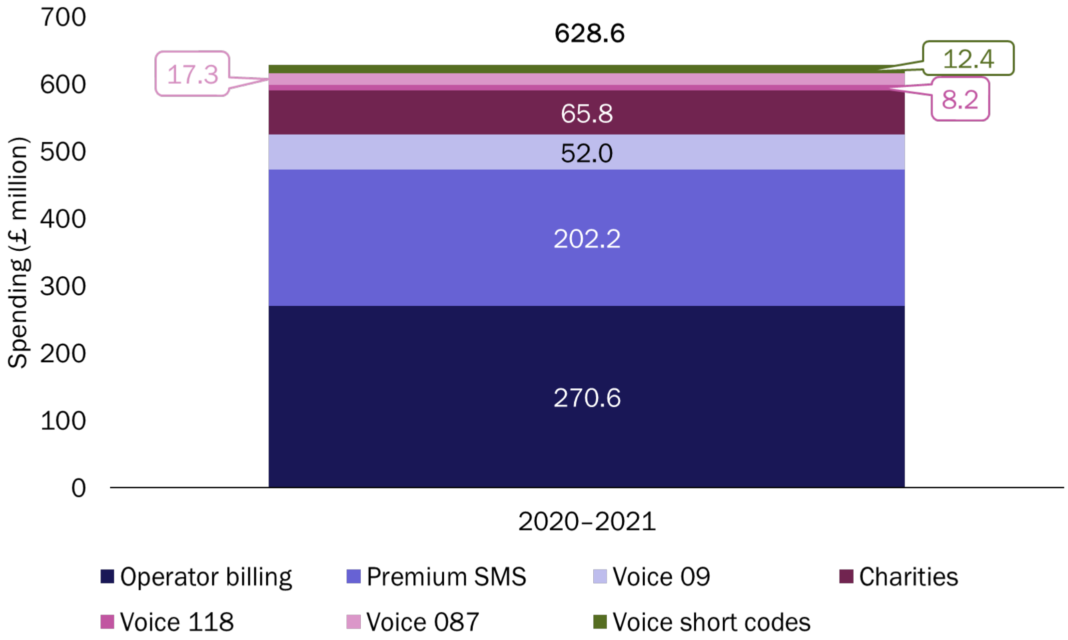
12 Note that the numbers in figures in this report are rounded, so totals may not appear to be equal to the sum of market segments.

A breakdown of end-user spending by channel and service category is provided in subsections 3.2 and 3.3 below. Section 4 provides a more-detailed discussion of the main factors that are influencing changes in the market in each spending channel.

3.2 Spend by channel

Operator billing captured the greatest share of the phone-paid services market in 2020–2021 (43%) and accounted for £270.6 million of consumer spending. This was closely followed by premium SMS, which accounted for £202.2 million (32% of the total consumer spend). Figure 3.2 provides a graphical breakdown of consumer spending by channel for 2020–2021.

Figure 3.2: End-user spending (excluding VAT), by spending channel, UK, 2020–2021



Source: Phone-paid Services Authority, 2021

The absolute net decline of the overall phone-paid services market between 2019–2020 and 2020–2021 (see Figure 3.3) was driven by reduced consumer spending in most channels.

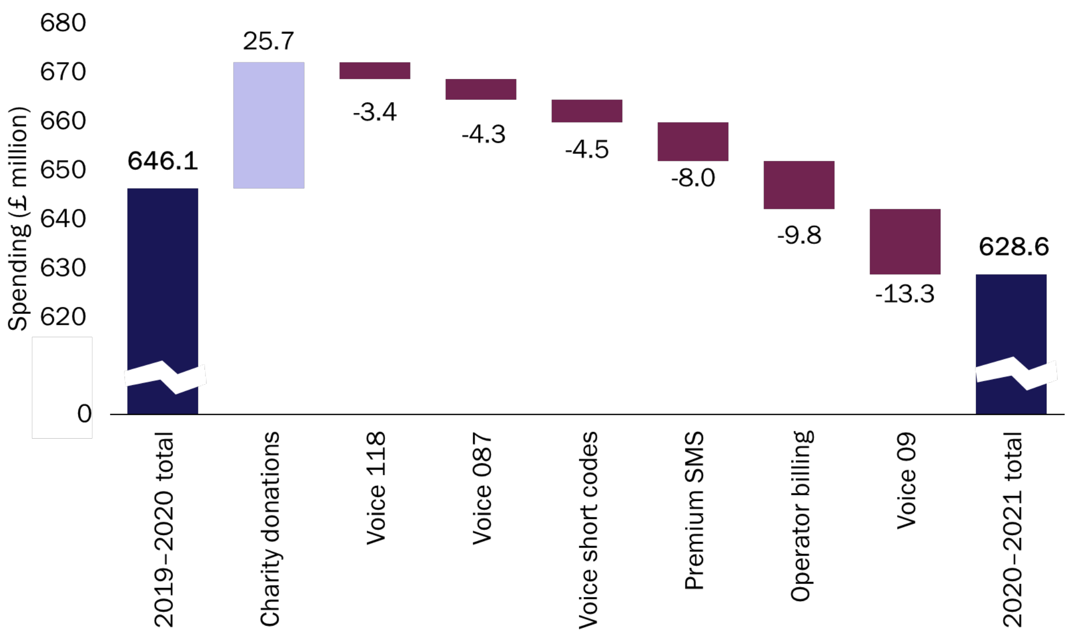
- **Spending via operator billing declined by £9.8 million year-on-year.** Spending on entertainment services increased as a result of individuals spending more time at home due to lockdowns. However, many subscription-based services experienced a significant decline in consumer spending as a result of the introduction of expanded special conditions for subscription services in November 2019 (more details are provided in Section 4.1).

- **Consumer spending via premium SMS decreased by £8.0 million in 2020–2021.** Spending on TV and radio engagement services continued to grow strongly thanks to an increase in audience sizes during lockdowns and higher levels of engagement, but a sharp decline in spending on subscription-based services resulted in the overall decrease in spending for the premium SMS channel (further details can be found in Section 4.2).

- **Charity donations captured an additional £25.7 million of spending in 2020–2021 compared to in 2019–2020.** Consumers were more charitable overall in 2020–2021 than in 2019–2020, despite a decrease in spending on certain telethon events (mostly due to the COVID-19 pandemic). Indeed, numerous causes received additional support throughout the course of the year (more detail can be found in Section 4.3).

- **Consumer spending on voice-based services using the 09, 087 and 118 numbering ranges or voice short codes decreased.** This is a continuation of the trend from the past few years, though there was an acceleration in the decline due to the COVID-19 pandemic. The shrinking user base, driven by the availability of cheaper or free alternatives, combined with the continuous migration of businesses to other number ranges (such as 01 or 03) or online channels played a key role in the decline in spending in this category. Traditional users of these services may have been incentivised to move to alternatives by home-bound family members (more detail is available in Sections 4.4 to 4.6).

Figure 3.3: Change in end-user spending (excluding VAT) between 2019–2020 and 2020–2021, by spending channel, UK[13]



Source: Phone-paid Services Authority, 2021

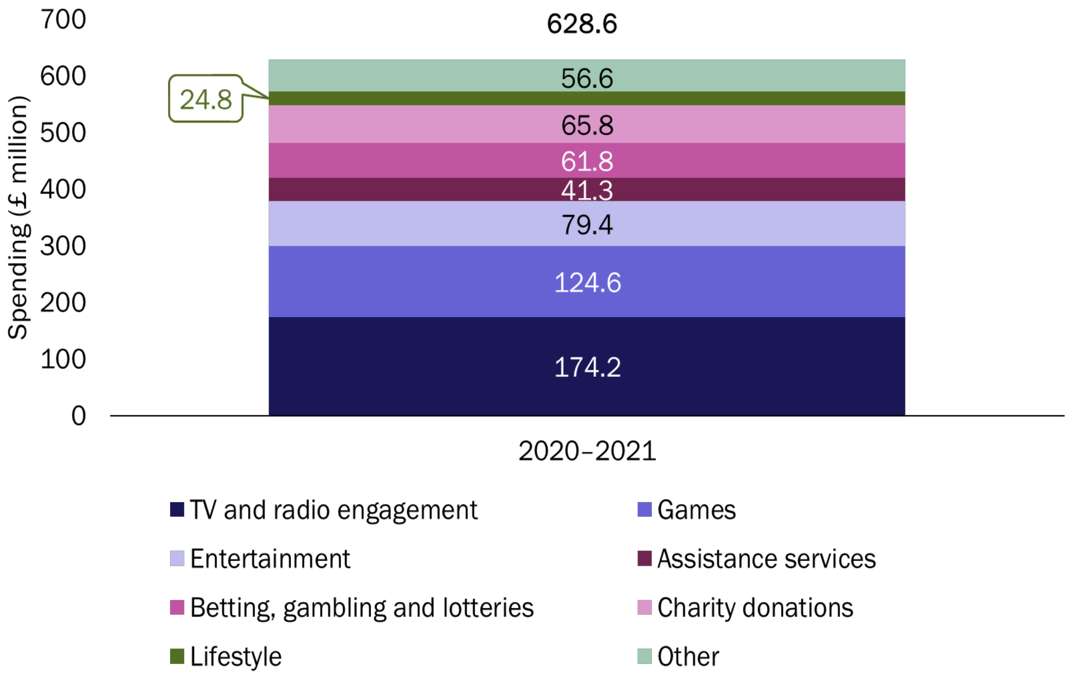
3.3 Spend by service category

Consumers in the UK spent an estimated £174.2 million on TV and radio engagement (for example, broadcaster competitions) in 2020–2021; this was the largest service category in terms of spending. Phone-paid games and entertainment services (such as music services) were the second- and third-largest service categories, respectively; they generated £124.6 million and £79.4 million in spending. These three service categories, including services offered by well-known consumer brands such as Spotify, Apple and Google, together

13 This chart shows the total spend in 2019–2020 on the left-most bar and the total spend in 2020–2021 on the right-most bar. Bars in between show the growth (in light purple) or decline (in dark red) by spending channel (for example, charity donations increased by £25.7 million between 2019–2020 and 2020–2021).

accounted for an estimated 60% of the total spend on phone-paid services, up from 58% in 2019–2020. Figure 3.4 provides an estimated breakdown of spending by service category.[14]

Figure 3.4: End-user spending (excluding VAT), by service category, UK, 2020–2021[15]



Source: Analysys Mason and Phone-paid Services Authority, 2021

Figure 3.5 provides a breakdown of the overall, year-on-year net decline in consumer spending by service category.

- Spending on **TV and radio engagement services** (+£28.1 million) benefitted from the lockdowns induced by the COVID-19 outbreak because they resulted in higher audience numbers and thus more engagement. This was compounded by the introduction of higher price points for participation by certain TV and radio broadcasters, with no corresponding significant decrease in the number of users.

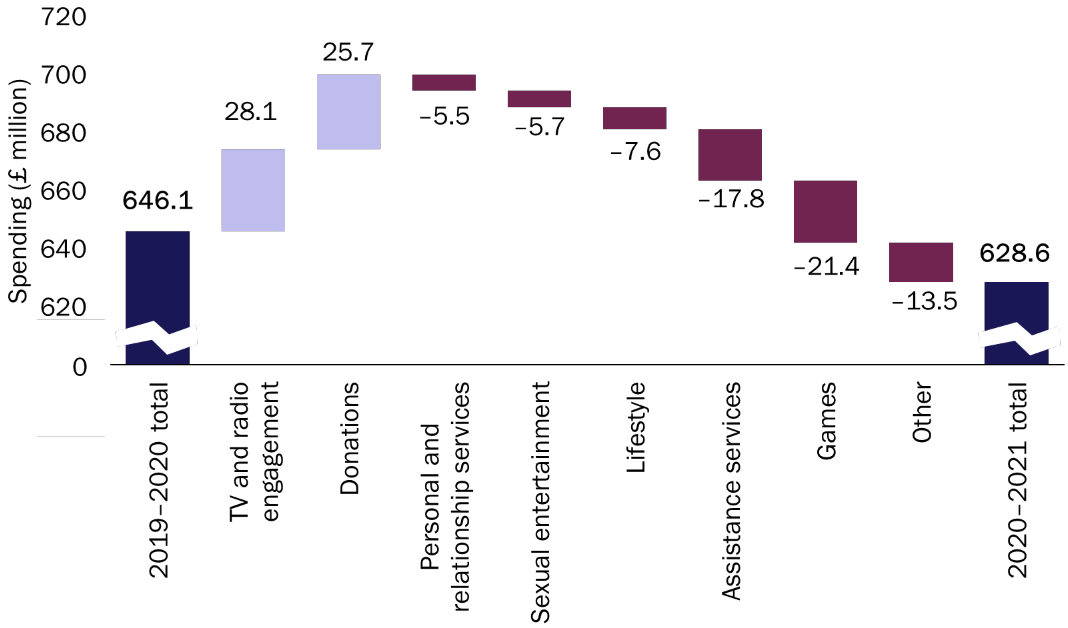
- Spending in the **games segment** declined by £21.4 million, primarily due to a significant decline in spending via premium SMS. Spending on games bundled through monthly subscriptions was significantly affected by the introduction of special conditions on subscriptions by the Phone-paid Services Authority in November 2019. Indeed, these conditions caused a large overall decline in spending, despite an increase in spending on gaming through operator billing. Some games, notably Fortnite, also moved away from app stores, and thus spending moved away from the phone-paid services market and towards credit cards.

14 Note that more detail regarding the service taxonomy (including definitions) and service-level data can be found in Annex A. Annex B expands further on our approach to estimating the breakdown of end-user spending by service category and individual service type.

15 'Other' includes service categories that are estimated to have generated £20 million or less. This includes sexual entertainment; personal and relationship services; competitions and quizzes; digital payments; information, news and education and device personalisation and security.

- Aside from games, services in the **assistance, lifestyle, sexual entertainment and personal and relationship** categories experienced the greatest decline in spending over the past 12 months. Spending on many of these services was declining prior to the COVID-19 pandemic, and the shift to online alternatives has accelerated this trend. Spending on other services that have limited or no marketing and advertising (such as device personalisation and security) also declined.

Figure 3.5: Change in end-user spending (excluding VAT) between 2019–2020 and 2020–2021, by service category, UK[16]



Source: Analysys Mason and Phone-paid Services Authority, 2021

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16 This chart shows the total spend in 2019–2020 on the left-most bar and the total spend in 2020–2021 on the right-most bar. Bars in between show growth (in light purple) or decline (in dark red) in spending by service category (for example, spending on lifestyle services decreased by £7.6 million between 2019–2020 and 2020–2021). 'Other' includes service categories in which spending is estimated to have changed by £2 million or less. This includes entertainment; betting, gambling and lotteries; competitions and quizzes; device personalisation and security; digital payments; games; information, news and education and personal and relationship services.

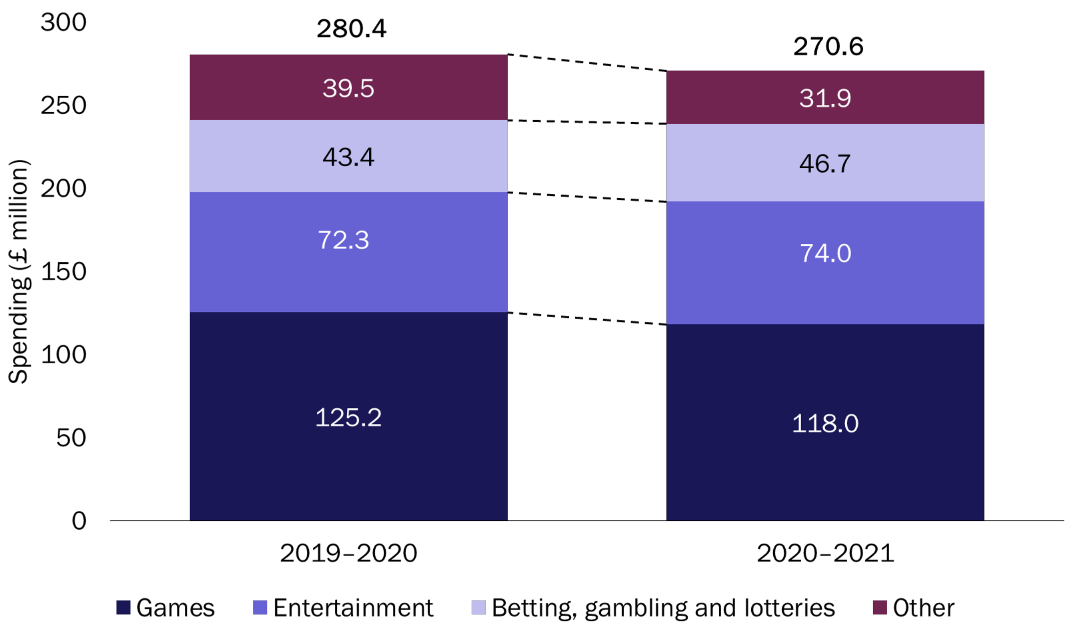
4. Analysis of key market drivers

The only channel to generate net growth in spending in 2020–2021 was charity donations, despite the postponement and cancellation of televised telethon events during the pandemic. Significant charity campaigns attracted additional donations. The strong take-up of games and entertainment services offered by large OTT providers resulted in some growth in spending via operator billing, but these gains were outweighed by the fall in spending caused by a significant decline in the number of users and individual use of subscription-based services, primarily as a result of the extension of special conditions from select subscription services to all subscription services from November 2019 onwards. Similarly, the popularity of competitions run by TV and broadcasters had a positive impact on spending via the premium SMS channel, but this was insufficient to offset the revenue decline experienced by many services using a subscription-based model. Spending on voice-based services that use the 09, 087 and 118 numbering ranges or short codes declined in line with long-term trends.

4.1 Operator billing

Operator billing was the largest spending channel in 2020–2021; it generated £270.6 million in end-user spending and accounted for 43% of the overall spend on phone-paid services. Games, entertainment and betting, gambling and lotteries were by far the three largest service categories for operator billing in terms of spending (88% share), as shown in Figure 4.1.

Figure 4.1: End-user spending (excluding VAT) via operator billing, by service category, UK, 2019–2020 and 2020–2021[17]



Source: Analysys Mason and Phone-paid services Authority, 2021

17 'Other' includes the eight remaining service categories: competitions and quizzes; device personalisation and security; digital payments; information, news and education; lifestyle; personal and relationship services; sexual entertainment and TV and radio engagement. No single category in 'Other' is estimated to have generated over 10% of the total revenue for the channel.

Below we discuss the key factors that have affected end-user spending via operator billing in these service categories.

Games and entertainment

Consumers in the UK spent an estimated £118.0 million on games purchases in 2020–2021, primarily by downloading paid-for games via large app stores (such as Apple App Store and Google Play), games aggregators (such as Microsoft Store on Xbox and Sony PlayStation Store) and games publishers (such as Blizzard, Riot Games and Epic Games), though in-game purchases of items or rewards (for example, in-game currency, additional lives or customisable content) also contributed. Entertainment services generated £74.0 million in revenue driven by the continued popularity of music and video streaming services.

Both service categories benefitted from COVID-19-related lockdowns because many potential consumers suddenly needed to fill time that was previously spent at work or doing other activities. The demand for streaming services, including Netflix and Disney Plus, was substantial enough for limits on streaming quality to be imposed during the first lockdown in March 2020. Similarly, interviewees spoke of a significant boost in the take-up of gaming services in the first half of the 2020–2021 financial year. Games on app stores have continued to grow in popularity, but the take-up of games that are available outside of app stores also grew this year; Fortnite notably circumvented both Google's and Apple's app stores. This move may have contributed to the slight decline in consumer spending on games via operator billing because customers are less likely to pay through operator billing outside of app stores, and instead prefer to pay via credit cards.

Spending on games that are bundled with monthly subscriptions declined significantly as a result of the extension of special conditions to all subscription-based services in November 2019 (these conditions were previously only applicable to recurring donations, adult services, online competitions and society lotteries). Any consumer that registers for a new subscription-based service now needs to go through a multi-step sign-up process. This includes an initial confirmation using either a PIN-based system, an account and password (such as an App Store account) or a text, followed by a second confirmation step using a confirmation button, biometrics (fingerprints or retinal recognition) or a second mobile originating text. The introduction of special conditions and their enforcement by the PSA reduced revenue which was in previous years artificially inflated as a result of inadvertent signups and limited transparency from some service providers. The decrease in consumer spending on subscription-based games has been a key driver of the decline in spending on games overall (both via operator billing and premium SMS; see Section 4.2).

Betting, gambling and lotteries

Consumers in the UK spent an estimated £46.7 million on betting, gambling and lotteries in 2020–2021. Most of the revenue in this category was generated from online gambling services (including mobile casino applications and websites), followed by sports betting services (16%) and lotteries (4%).

Growth in spending on betting and gambling services accelerated in 2020–2021 (+8% compared to +2% in 2019–2020), primarily as a result of the closure of physical gambling locations such as casinos during most of 2020. The ban on the use of credit cards imposed by the UK Gambling Commission (which came into force in April 2020) is also likely to have incentivised some individuals to shift to operator billing as a payment method. Spending on society lotteries has remained stagnant, despite hopes that it would grow into a significant market segment over the last few years. Industry stakeholders have mentioned difficulties in attracting partners during such a turbulent year; any significant growth in spending may come in a few years' time.

Other services

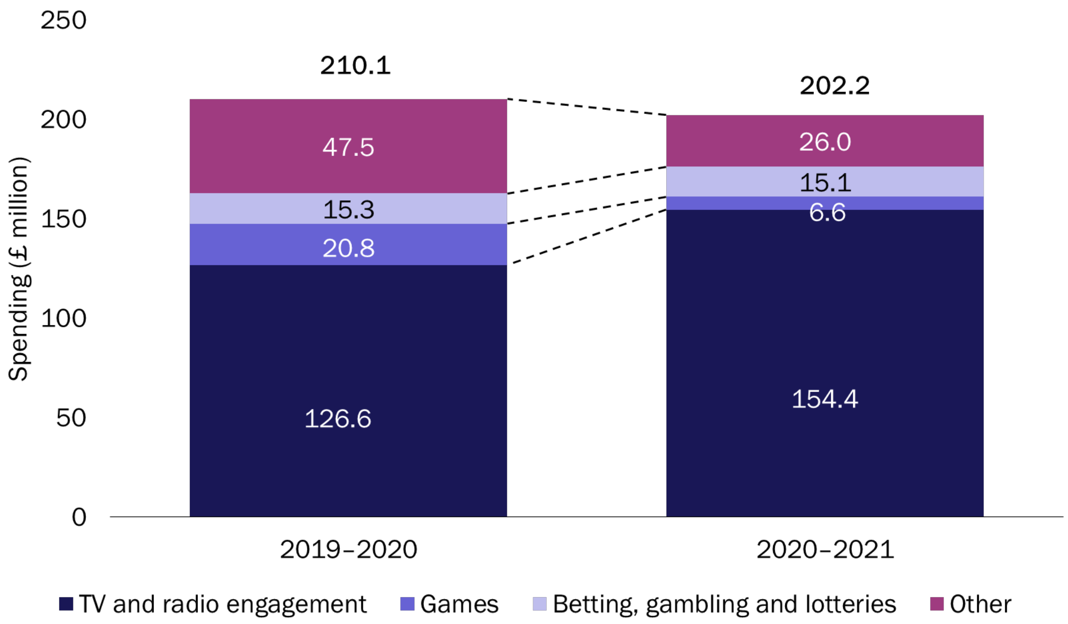
Spending in most other service categories declined significantly in 2020–2021. The demand for some services that are traditionally used outside of the home (such as travel information services, alerts and weather) declined during lockdown, while that for other services decreased as a result of the extension of special conditions to all services using a subscription-based delivery model. Our discussions with industry stakeholders highlighted that some MNOs implemented (at around the same time as the introduction of the special conditions) additional rules that required existing users of subscription services to opt in again. Our research suggests that some service providers' subscriber bases may have decreased in size by over 50% as a result of this regulation.

Limited progress has been made regarding the introduction of new services that can be paid for via operator billing. Interviewees spoke about the potential of enabling consumers to pay for physical items via operator billing, including tickets for events or parking, but the demand for these items was dramatically reduced during COVID-19-related lockdowns, thereby completely halting any progress. However, some deals for ticketing have been provisionally agreed, so there is potential for this segment to expand once all lockdown restrictions have been lifted in the UK. Rich Communications Services (RCS) also remain a talking point, and some interviewees highlighted the need for smoother customer journeys and tighter integration of phone-paid payment mechanisms into services. However, RCS remain relatively unknown and unused, despite advancements such as the addition of RCS to Google Messages. Until RCS become ubiquitous, it is unlikely that services will support them, and therefore it is unlikely that phone-paid services will benefit from any potential that they hold.

4.2 Premium SMS

Premium SMS was the second-largest channel in terms of spending on phone-paid services in the UK in 2020–2021; it accounted for 32% of the market. As shown on Figure 4.2, TV and radio engagement was the largest service category in terms of spending via premium SMS (76% of all spending), followed a long tail of other services, the spending on which typically declined year-on-year.

Figure 4.2: End-user spending (excluding VAT) via premium SMS, by service category, UK, 2019–2020 and 2020–2021[18]



Source: Analysys Mason and Phone-paid Services Authority, 2021

Below, we discuss the key factors that have affected the end-user spending via premium SMS for each of the main service categories.

TV and radio engagement

Spending on TV and radio engagement reached an estimated £154.4 million in 2020–2021 (22% increase year-on-year), primarily due to the popularity of the competitions run by TV and radio broadcasters. The pandemic had a different effect on TV audiences compared to radio audiences: radio shows that run in the mornings and afternoons lost commuters and parents on the school run, while TV viewing numbers increased (in contrast to previous trends). However, radio competition revenue continued to grow; there was an increase in the entry prices for some radio competitions (from £1 to £1.50 and £1.50 to £2), with no corresponding decrease in the number of entries, thereby resulting in an overall increase in competition revenue.

Interaction with TV competitions was higher during lockdowns and lower during periods out of lockdown, as would be expected. Competition revenue was largely unaffected by the inability to film shows at certain points of the year, and online platforms such as ITV Win became increasingly popular. Broadcasters reacted to the economic uncertainty by launching more free competitions and by increasing the chances of winning (smaller) prizes, which had the desired effect of ensuring that audiences continue playing.

Spending on other engagement methods such as voting or texting a show host has continued its ongoing decline because these services are increasingly being offered for free.

18 'Other' includes the eight remaining service categories: competitions and quizzes; device personalisation and security; digital payments; entertainment; information, news and education; lifestyle; personal and relationship services and sexual entertainment. No single category in 'Other' is estimated to have generated over 5% of the total revenue for this channel.

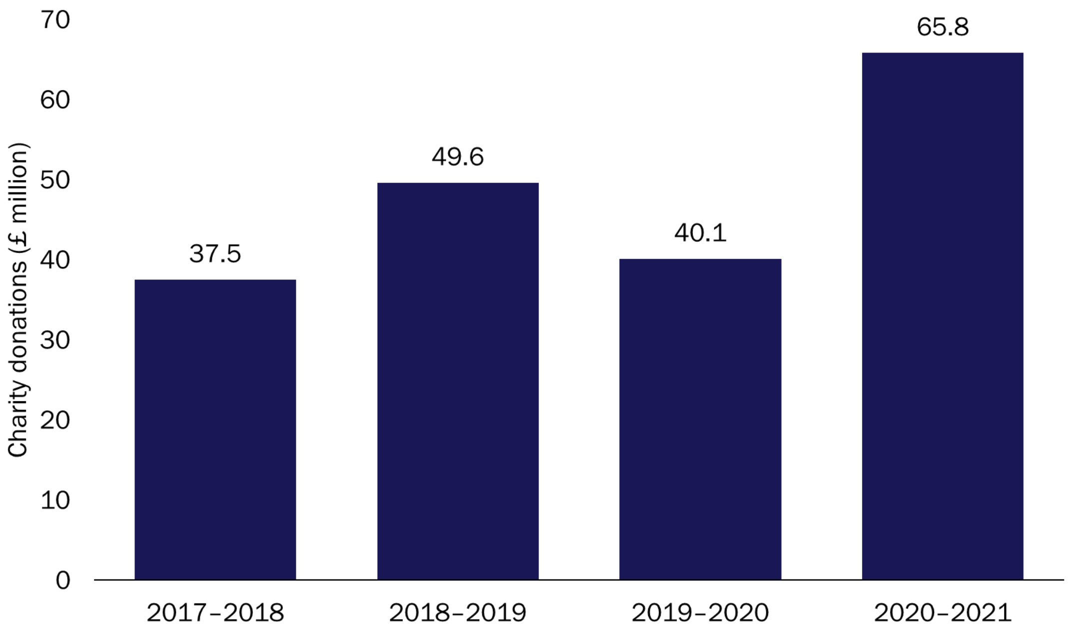
Other services

Consumer spending via premium SMS for most other services declined significantly in 2020–2021. As discussed in Section 4.1, the extension of special conditions to all subscription services (such as dating, fitness and games provided as part of a weekly or monthly subscription), many of which are paid for via premium SMS, has had a significant impact on service usage since November 2019. Similarly, the new requirement for existing subscription service users to opt in again through a multi-step process that was implemented by select MNOs resulted in consumers effectively opting out of subscription services. Users also continued their migration to free or lower cost alternatives to many services (for example, in the information, news, lifestyle and sexual entertainment categories).

4.3 Charity donations

Spending on charity donations (via premium SMS) reached a record high of £65.8 million in 2020–2021, up from £40.1 million in 2019–2020 (+63.8% year-on-year). As shown in Figure 4.3, the phone-paid charity donation spend is cyclical, with biannual ‘up’ and ‘down’ years due to the seasonality of telethon events. Even so, spending in 2020–2021 was significantly greater (+£16.2 million or +33%) than that in 2018–2019, the previous ‘up’ year.

Figure 4.3: Charity donations made via phone-paid payment mechanisms, UK, 2017–2018 to 2020–2021



Source: Phone-paid Services Authority, 2021

The BBC Big Night In, held in April 2020 in response to the COVID-19 pandemic, was a key driver of this growth. This one-off event raised over £70 million for Comic Relief, Children in Need, NHS healthcare workers and those affected by the COVID-19 pandemic. A total of £27 million was raised on the night and a significant proportion of this was generated through text-to-donate mechanisms.

Other telethon events were delayed or even cancelled as a result of the pandemic. For example, Stand Up To Cancer was not held in 2020 and Soccer Aid 2020 was postponed from June to September. Telethons that did go ahead faced severe filming restrictions, which resulted in a reduction in the quantity and quality of content shown. The strong link between quality of content and on-night donations was reflected in the below-average amounts raised for both Children in Need and Red Nose Day in 2020–2021. Nonetheless, the amount raised for the BBC's Big Night In was large enough to offset these declines, thereby resulting in a high overall spend on charity donations made during telethons in 2020–2021.

Recurring donations provided a further boost to the 2020-2021 charitable spending. More charities embraced and promoted text-to-donate services due to the inability to reach potential donors face-to-face. Furthermore, a number of worthy causes emerged during 2020 and gained media prominence, including the NHS Charities Together campaign. These causes inspired an increase in the number of donations outside of telethon events, which accounted for over 25% of phone-paid donations (£16.5 million) in 2020-2021. Of that amount, an estimated 90% (£14.8 million) came from recurring donations made via a monthly subscription, while the rest included one-off / single donations.

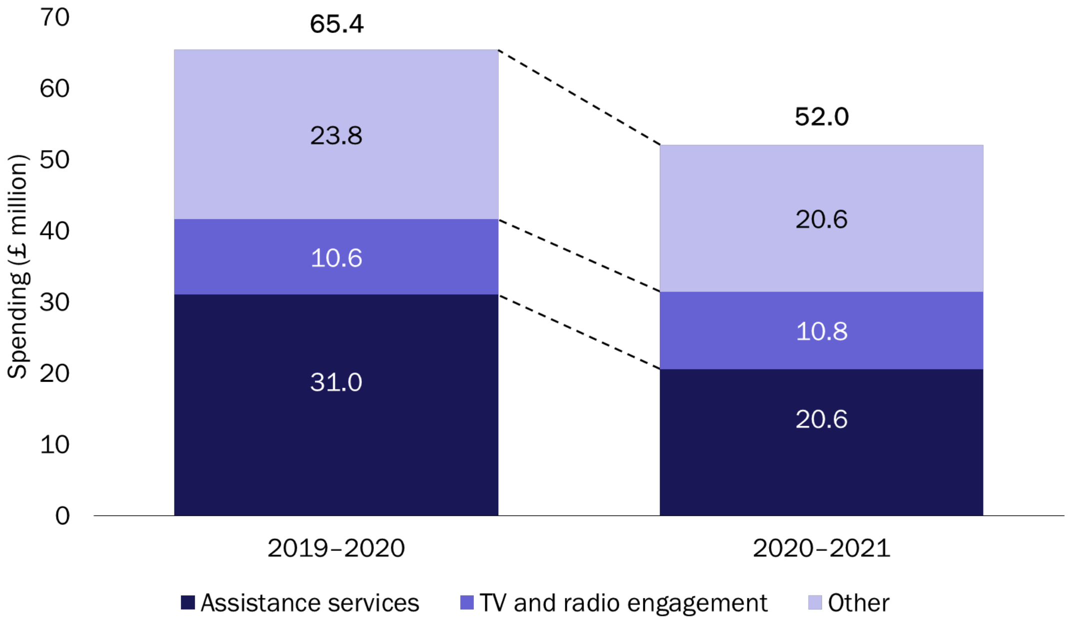
4.4 Voice 087 and voice 09

Spending on services accessed and paid for via premium rate 09 and 087 numbers declined to £52.0 million and £17.3 million, respectively, in 2020–2021 (down by 20.4% and 19.8%, respectively).

Voice 09

Google's ban on advertising information, connection and/or signposting services (ICSS) (implemented in March 2020) for consumer protection significantly reduced the ability of service providers to attract new users through advertising. The availability of free or lower-cost alternatives to many services previously provided through 09 numbers (such as weather forecasts, travel information, news, dating and adult services), combined with generally poor customer satisfaction (see Section 7.3), the introduction of new special conditions for ICSS services by the PSA in November 2019, and the migration of service providers away from the 09 numbering range to other payment methods (such as credit cards) also played a role in the sharp fall in consumer spending on voice 09 services in 2020–2021 (Figure 4.4). We note that services such as competitions run by TV/radio broadcasters that tend to be popular across other spending channels (such as operator billing and premium SMS) have also fared well compared to other voice 09 services.

Figure 4.4: End-user spending (excluding VAT) via voice 09, by service category, UK, 2019–2020 and 2020–2021[19]



Source: Analysys Mason and Phone-paid Services Authority, 2021

Voice 087

The decline in spending via voice 087 services follows the same broad trends as in previous years, largely due to a shrinking user base and the shift of organisations' post-sales calls functions (which have historically been the primary functions of 087 numbers) to cheaper or free alternatives. The role of voice 087 numbers has been under review by Ofcom since the launch of a formal industry consultation in June 2019, but no public decision has been made yet.

4.5 Voice short codes

Spending on services using voice short codes declined sharply from £16.9 million in 2019–2020 to £12.4 million in 2020–2021 (–26.7%). This is a continuation of the broad decline in consumer spending that started in 2018–2019 because users of most of the services that are offered via this payment method (such as information, news and education, sexual entertainment and low-cost international calls) are migrating to cheaper, free or more-engaging alternatives.

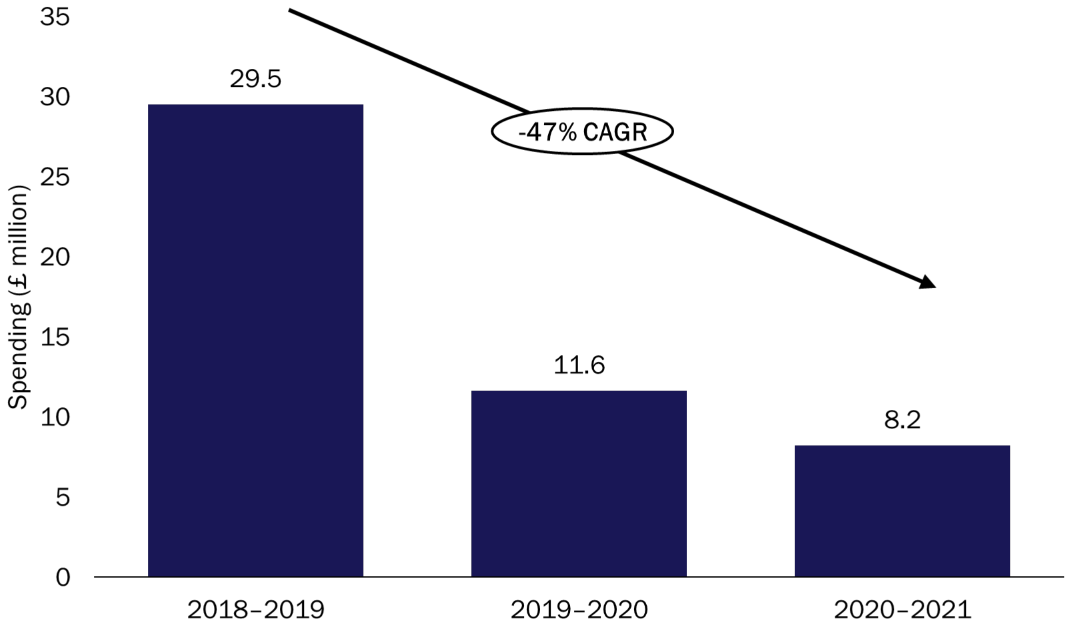
4.6 Voice 118

Spending for directory enquiries reached £8.2 million in 2020–2021. This represents a steep decline year-on-year (–29.3%), though it is less of a decline than was seen in the 2 years prior (–60.7% in 2019–2020 and –33.7% in 2018–2019). This is because the effects of caps on directory enquiry calls imposed by Ofcom in November 2018 (which came into force in April 2019) have already been felt. Spending on directory enquiry

19 'Other' includes the five remaining service categories: competitions and quizzes; digital payments; information, news and education; personal and relationship services and sexual entertainment. No single category in 'Other' is estimated to have generated over £10 million of revenue for this channel.

services is now declining in line with call volumes, the rate of decline of which is likely to continue to slow down over the next few years as a small core of loyal users will continue to use this type of service.

Figure 4.5: End-user spending on directory enquiries (excluding VAT), UK, 2018–2019 to 2020–2021



Source: Phone-paid Services Authority, 2021

5. Market outlook for 2021–2022

The size of the phone-paid services market is expected to decline to £599.5 million in 2021–2022 (down by 4.6% year-on-year). Many legacy trends in the market have been exacerbated by the COVID-19 pandemic, as well as the overall threat of challenging macroeconomic conditions as a result of the pandemic and Brexit. Spending via operator billing will decline, despite the agreement between Three and Apple (finalised in December 2020). Spending via premium SMS is also expected to decline, albeit at a slower rate, because TV and radio audience numbers will no longer be boosted by the absence of competition from other activities. Charity donations are expected to decline significantly, though this represents a reversion to the norm after an exceptional 2020–2021, and will result in spending on donations being broadly comparable to, though slightly above, those from 2019–2020. Spending on voice-based services will continue to decline, though the rate of decline will slow as service user bases become increasingly formed of loyal core users.

5.1 Context

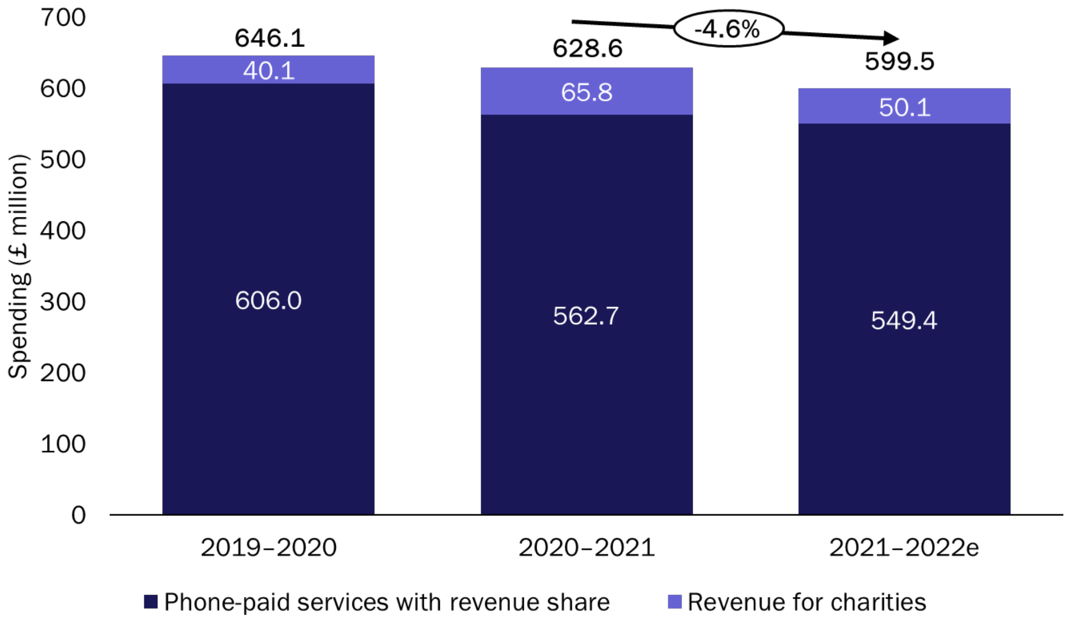
The phone-paid services market should return to 'normal' in 2021–2022 after the disruption to working practices and leisure activities in 2020–2021 due to the COVID-19 pandemic. Much of the uncertainty in the 2021–2022 outlook is caused by not knowing whether the UK will finally move past the repeated waves of COVID-19 infections and to what extent consumers will return to their pre-pandemic lives. We have assumed that restrictions will end as planned in July 2021 and will not return, but that there may be subsequent, smaller waves of infections and some resulting hesitancy from the British public to return to outdoor activities.

This will mean a gradual return to pre-pandemic trends for some, but not all, phone-paid services. The three major COVID-19-related lockdowns in the UK in 2020–2021 caused significant changes in consumer behaviour; spending shifted towards entertainment services as people spent more time at home. This trend is likely to recede somewhat during 2021–2022, but many of these services will retain a portion of their new customers. The lockdowns also accelerated the shift from legacy services to online alternatives; we do not expect that these services will recover because the alternatives are typically superior and as such, there is no incentive to switch back. The following sections discuss our expectations for the phone-paid services market in 2021–2022 in more detail.

5.2 Overall market size

The size of the phone-paid services market fell in 2020–2021, despite exceptional spending on charity donations. Spending on charity donations is likely to return to more normal levels in 2021–2022 (partly due to the seasonality of telethons) and as such, we forecast that the overall spend on phone-paid services will decline even further to £599.5 million (-4.6% year-on-year; Figure 5.1). Non-charity spending will decline to £549.4 million (-2.4% year-on-year).

Figure 5.1: End-user spending (excluding VAT) on phone-paid services, UK, 2019–2020 to 2021–2022e (estimated)



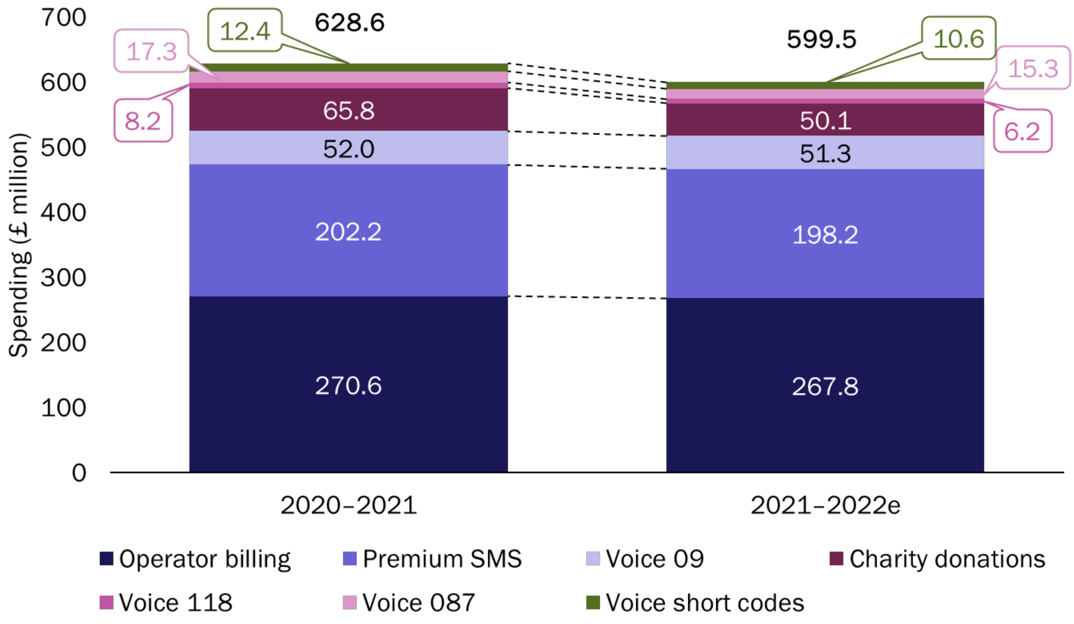
Source: Analysys Mason and Phone-paid Services Authority, 2021

A high-level analysis of the end-user spending split by spending channel and service category is provided in Sections 5.3 and 5.4 below.

5.3 Spend by channel

Spending via operator billing will continue to decline, though at a slower rate than in 2020-2021, to reach £267.8 million (-1.0% year-on-year), but will remain the largest channel within the phone-paid services market. Premium SMS will remain the second largest channel, and spending via this channel will also decline slightly to £198.2 million (-2.0% year-on-year). The rest of the market will continue to decline and will account for only 22.3% of the total spend in 2021–2022. Figure 5.2 provides a breakdown of end-user spending in 2020–2021 and a forecast for 2021–2022 spending by channel. Figure 5.3 shows how spending is forecast to change between 2020–2021 and 2021–2022.

Figure 5.2: End-user spending (excluding VAT) by spending channel, UK, 2020–2021 and forecast for 2021–2022



Source: Analysys Mason and Phone-paid Services Authority, 2021

Figure 5.3: Change in end-user spending (excluding VAT) between 2020–2021 and 2021–2022 (estimated), by spending channel, UK

Source: Analysys Mason and Phone-paid Services Authority, 2021

These changes, and their underlying reasons, are detailed and explored below.

- **Spending on charity donations is expected to decline in 2021–2022**, though this is merely a reversion to a more normal level of spending (see Figure 4.3). Indeed, spending on charity donations reached £65.8 million in 2020–2021, compared to £40.1 million in 2019–2020 and £49.6 million in 2018–2019. Telethon events account for a significant portion of phone-paid charity donations (see Section 4.3), so the biannual cycle of key telethon events such as Red Nose Day means that phone-paid donations are typically higher every other year. As such, a total of £50.1 million in 2021–2022 would still compare favourably against the 2019–2020 total (+£10.0 million, +25.0%). This increase is the result of a number of factors, including an increase in overall giving in the UK, an increase in the use of text-to-donate functions, an increase in the cap on text-to-donate from £30 to £40 for some charities (e.g. BBC Children In Need), and an increase in non-telethon donating. Charities increasingly used and promoted text-to-donate services last year, which contributed to the high levels of spending and will have knock-on effects going forward. An estimate of the donations made through telethons is provided in Figure 5.4.

Figure 5.4: Reported on-the-night donation totals for telethon events (£ million), UK, 2016–2021, and estimated totals for 2021–2022

Telethon event	2016–2017	2017–2018	2018–2019	2019–2020	2020–2021	2021–2022 (estimated)
Children in Need (November)	46.6	50.2	50.6	47.9	37.0	50.0
Red Nose Day (March)	82.2		63.5		52.0	
Sports Relief (March)		38.2		40.5		42.9
Stand Up To Cancer (October)	15.6		24.6		26.3[20]	
STV Appeal (September)	2.6	2.6	2.6	2.6	3.5	3.6
BBC Big Night In (April)					27.3	
Total	147.0	91.0	141.3	91.0	146.1	96.5

Source: Analysys Mason, 2021

- **Spending via operator billing will decrease by £2.8 million** (-1.0% year-on-year), in spite of the new operator billing agreement between Three and Apple, which was finalised in December 2020. This agreement had limited impact in 2020–2021 due to its timing in the financial year and limited consumer awareness and this will continue in 2021-2022. Spending in the gaming and entertainment categories grew during lockdown periods in 2020–2021 and will decline now that lockdowns have eased. Spending on betting and gambling will grow however, boosted by the return of year-round sports betting and the increasing prominence of phone-paid services due to the Gambling Commission's ban of credit card payments in April 2020. New services, including the ability to purchase parking and event tickets, may begin to emerge, but many providers are likely to wait until the introduction of the Phone-paid Service Authority's Code 15 so as to remove uncertainty over business case viability.

- **Spending via premium SMS will decline by £3.9 million** (-2.0% year-on-year), and the trends from the previous year will continue. Competitions run by TV and radio broadcasters will continue to grow in popularity, though significantly less so than in the last few years as the market heads towards saturation, especially with the lifting of lockdowns and the return of outdoor activities. This will be counterbalanced by

20 The main Stand Up To Cancer live TV show was postponed, but the campaign did run online (and to some extent on screen, through the Great British Bake Off for Stand Up To Cancer) and generated over £26.3 million in donations.

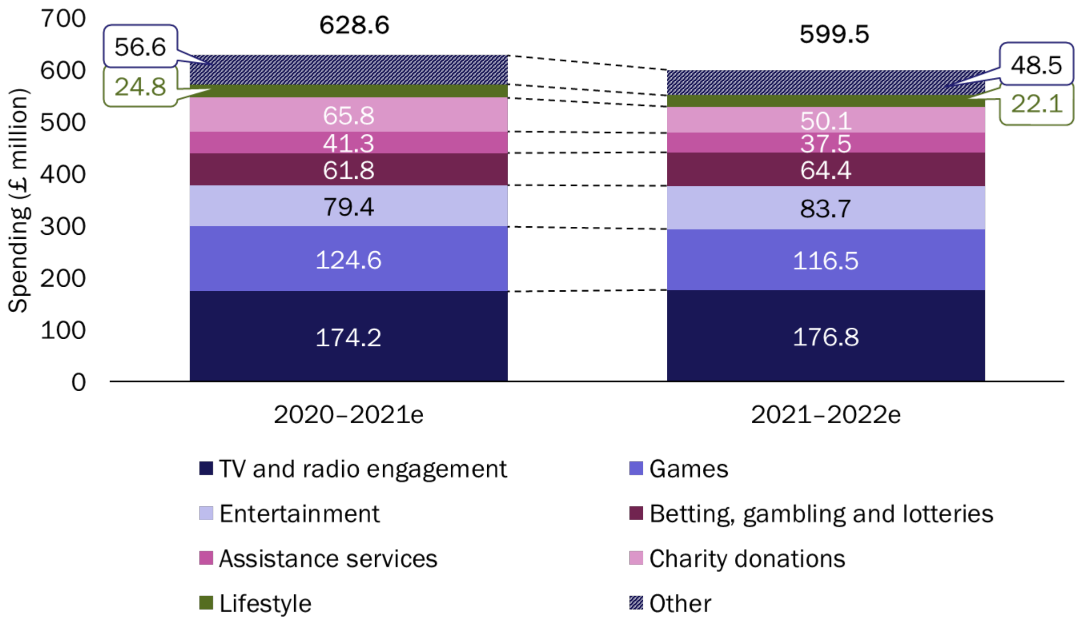
a continued decline in the take-up of premium SMS subscription services (such as the bundling of games as part of monthly subscriptions) and other categories such as alerts.

- **Spending on all voice-based services will decline, just as in 2020–2021.** Aside from voice 09 services, which performed unexpectedly well in 2019-2020 (for reasons explained in Section 4.4 and last year's market review), spending has decreased for every other voice-based payment channel since 2017-2018. This long-term decline in spending is due to the availability of cheaper or superior alternatives (typically online). Customer satisfaction is also relatively low across voice-based, often due to 'bill shock' from poorly advertised access charges, which makes alternatives appear even more attractive to consumers. The decline in spending in 2021–2022 is anticipated to be smaller than that from 2020–2021 because the shift to online alternatives is likely to have been accelerated during lockdown periods and the decline of legacy services spending naturally slows as the remaining user base is increasingly formed of loyal core users. Voice 09 services continue to hold up better than other voice-based services, with new entrants into the market causing the decline to be limited to -£0.8 million (-1.5%).

5.4 Spend by service category

Spending on TV and radio engagement will grow by £2.6 million year-on-year, further solidifying the position of this category as the largest in the phone-paid services market. Spending on games and entertainment will decline, after positive impacts from lockdown are reversed - but these categories will remain the second- and third-largest, respectively. Spending on betting, gambling and lotteries will grow and this category will remain the fourth-largest. Figure 5.5 provides a breakdown of spending in 2020–2021 and 2021–2022 by spending channel.

Figure 5.5: End-user spending (excluding VAT), by service category, UK, 2020–2021 and 2021–2022e (estimated)



Source: Analysys Mason and Phone-Paid Services Authority, 2021

The following key trends illustrate how spending in key service categories will change between 2020–2021 and 2021–2022 financial (Figure 5.6 provides a graphical breakdown).

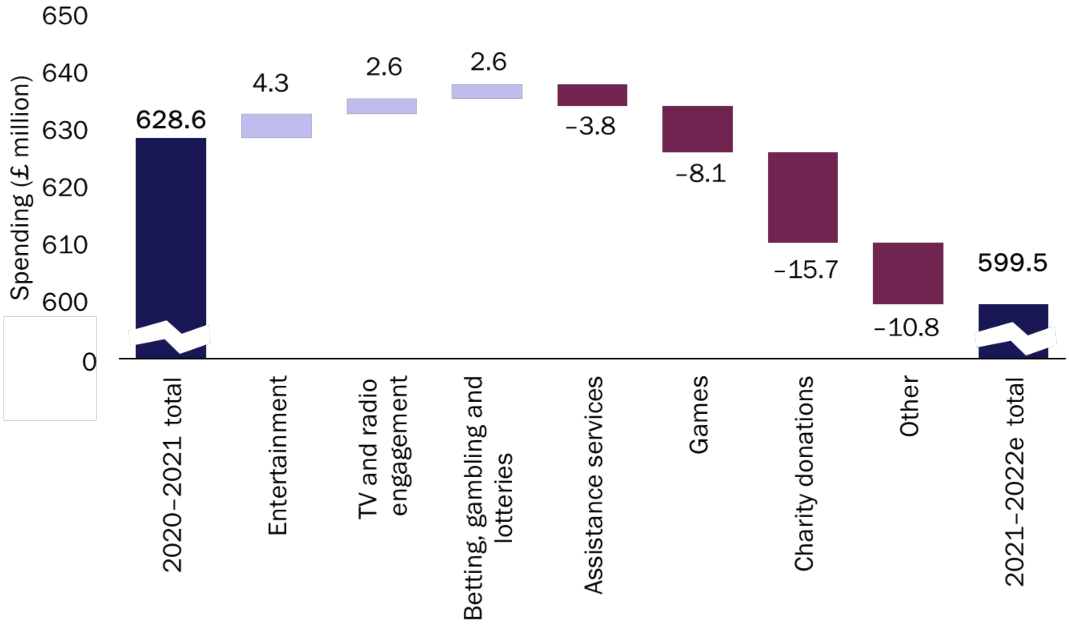
- **Spending on TV and radio engagement will increase by £2.6 million.** This is significantly less than the £28.1 million increase observed in 2020–2021 2021, because previously captive audiences now have access to alternative, outdoor activities after the easing of lockdowns. The broadcaster competitions market has been exceptionally successful in the past few years, but it will eventually approach saturation due to the gradual decline in the size of TV and radio audiences (though this trend was reversed during the COVID-19 pandemic). As a result, potential revenue growth will be limited to increases in the average spend per user. As discussed in Section 4.2, radio broadcasters have increased the entry prices for competitions in the last 2 years, but it will be difficult to keep increasing prices without also decreasing the number of entrants. TV broadcasters have launched online platforms and have changed their prizes in order to incentivise an increase in the number of entries, but this will have a marginal effect compared to the return of outdoor activities.

- **End-user spending on games is expected to decline by £8.1 million.** As discussed in Section 4.1, spending on gaming was both boosted by lockdowns and negatively affected by the Phone-paid Service Authority's subscription regulation. With the easing of lockdown restrictions in 2021-2022, spending on gaming should subsequently decline through 2021-2022.

- **Spending on entertainment services will grow by £4.3 million**. Spending via operator billing will continue to grow and the decline in spending via premium SMS will be less than in 2020–2021. The trend for spending on entertainment services will be similar to that for spending on gaming thanks to the dominant effect of the return of outdoor activities, but overall, spending will be boosted by the new agreement between Three and Apple, which will increase the size of the addressable market. Some of the users that first subscribed to entertainment services during lockdowns will stop using these services, but a significant portion will not stop using them immediately (as is the case for gaming).

- **Spending on betting, gambling and lotteries will grow by £2.6 million.** Growth has been consistent since the Gambling Commission banned the use of credit card payments for betting or gambling in April 2020. Previously, merchants in this space were incentivised to switch users from phone-paid services to credit cards in order to avoid monthly limits on phone-paid service spending. Now, higher spending users are more likely to use phone-paid services (where the aforementioned limits provide a healthier environment for gambling services). This segment will benefit from the return to year-round sports betting in 2021–2022, following cancellations due to the COVID-19 pandemic in 2020–2021.

Figure 5.6: Change in end-user spending (excluding VAT), by service category, UK, 2020–2021 to 2021–2022e (estimated)[21]



Source: Analysys Mason and Phone-paid Services Authority, 2021

The most significant declines in spending are expected for games, assistance services and charity donations, as shown in Figure 5.6. The £15.7 million decline in donations is explained in Section 5.3, and is a simple reversion to the norm after an exceptional year in 2020–2021. The £3.8 million decline in spending on assistance services follows a £17.8 million decline in 2020–2021, and represents a continuation of the trends explored in Section 4.6.

[21] This chart shows the total spend in 2020–2021 on the left-most bar and the total spend in 2021–2022e on the right-most bar. Bars in between show growth (in light purple) or decline (in dark red) in spending by service category.

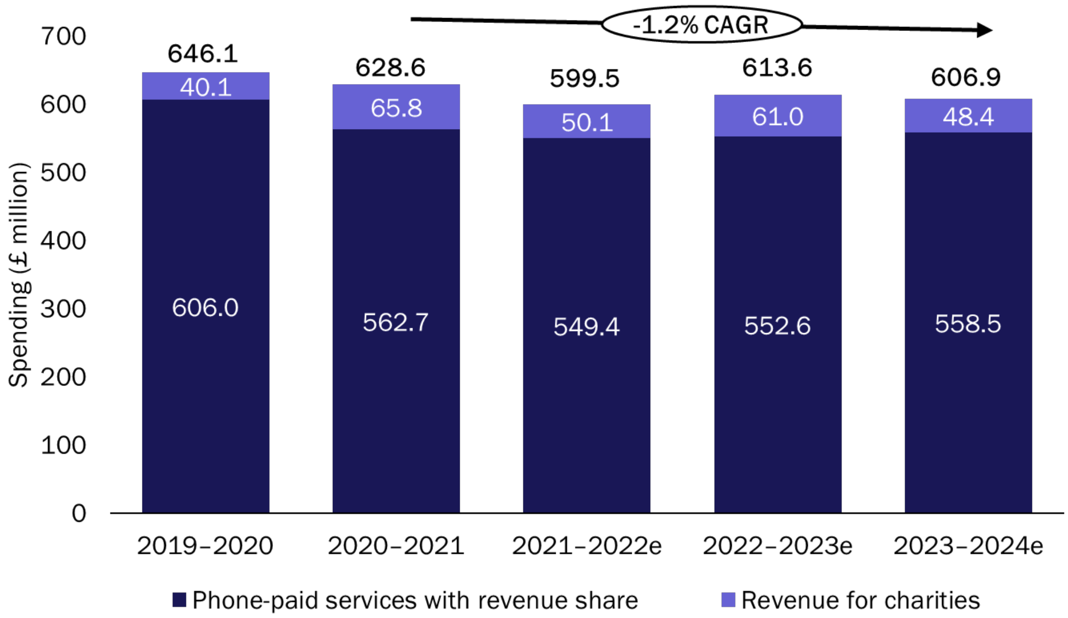
6. The phone-paid services market beyond 2021–2022

We expect that the phone-paid services market in the UK will return to growth in 2022–2023; it will be worth £618.7 million (+3.2% from 2021–2022). We forecast that there will be some recovery from the challenging conditions in 2021–2022 thanks to the decreasing impact of the decline in the use of legacy, voice-based services and the increased spending via operator billing and premium SMS. Spending on key services, including TV and radio engagement, games, entertainment and betting, gambling and lotteries services, will grow incrementally during the forecast period. The overall market will remain relatively steady throughout the forecast period; the seasonality of charity donations (due to telethon events) will cause the largest changes year-on-year.

6.1 Future evolution of consumer spending

End-user spending will decline in 2021-2022 then recover to £552.6 million in 2022-2023 and £558.5 million in 2023-2024. Charity donations are expected to fluctuate; £61.0 million will be donated in 2022–2023 and £48.4 million will be donated in 2023–2024. This will cause a slight decrease in the overall spend to £606.9 million in 2023–2024 (at a CAGR of –1.2% between 2020–2021 and 2023–2024).

Figure 6.1: End-user spending (excluding VAT) on phone-paid services, UK, 2019–2020 to 2023–2024e



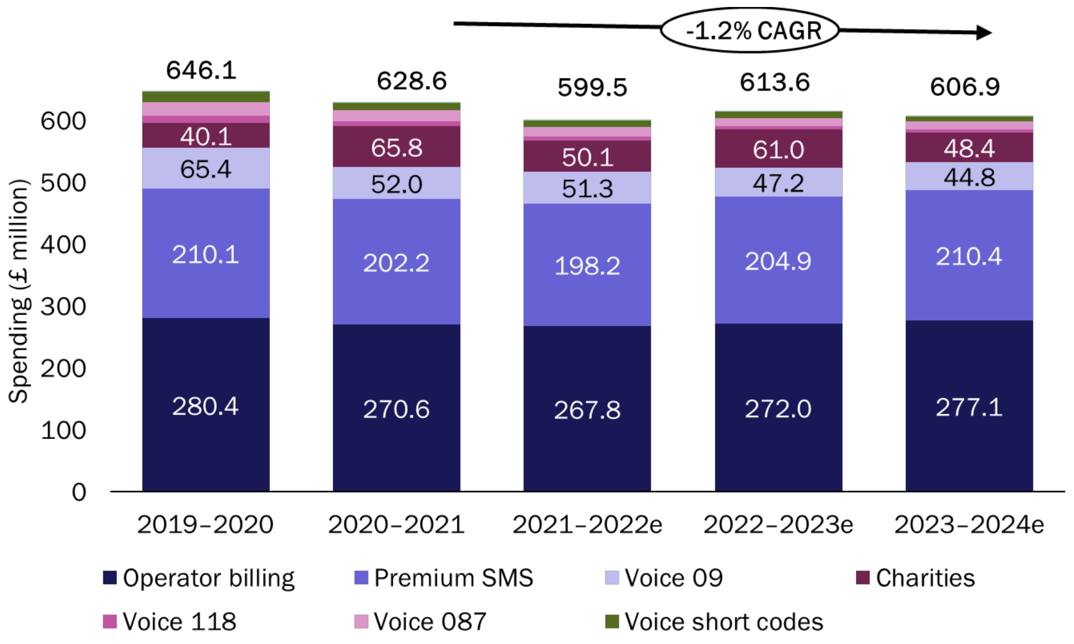
Source: Analysys Mason and Phone-paid Services Authority, 2021

A high-level analysis of the trends in end-user spending by spending channel and service is provided in Sections 6.2 and 6.3.

6.2 Spend by channel

Operator billing and premium SMS will remain the two largest spending channels throughout the forecast period (together accounting for 80.3% of spending) and will be the only two payment channels in which spending will grow over the next 3 years. Spending via all voice-based channels will continue to decline, and will account for just 10.4% of the phone-paid services market by 2023–2024. A breakdown is provided in Figure 6.2.

Figure 6.2: End-user spending (excluding VAT) by spending channel, UK, 2019–2020 to 2023–2024e (estimated)



Source: Analysys Mason, Phone-paid Services Authority, 2021

The key trends by spending channel are detailed below.

- **Spending via operator billing is forecast to grow to £277.1 million by 2023–2024, at a CAGR of 0.8%.** Spending will decline in 2021-2022 but will be gradually boosted by the Three–Apple deal agreed in December 2020. The popularity of gaming and entertainment services using this channel will continue to grow, partly due to an increase in the consumption of mobile content. New services are likely to begin to emerge over the next 2–3 years, for example event and parking tickets, but are unlikely to play a significant role in the medium term. These services have yet to be implemented and some initial success will be required to prove that business cases are viable and to incentivise further agreements. RCS-enabled services may result in some increase in spending towards the end of the forecast period, but we have assumed that they will have a limited impact during the forecast period because they are unlikely to be popular with consumers or content providers until take-up improves and significant services are supported.

- **End-user spending via premium SMS will grow to £210.4 million by 2023–2024, at a CAGR of 1.3%.** After a small decline in 2021-2022, growth for this channel will be slow over this period because the use of many legacy services will continue to decline. This is due to a number reasons, including the presence of alternatives, non-compliance with Phone-paid Services Authority regulations or the impact of regulation on subscriptions. From 2022-2023 onwards growth in spending via premium SMS will come from TV and radio engagement, as in previous years. This growth will begin to slow down as the market matures and approaches saturation, though spending on this service will still increase significantly throughout the forecast period. The rate of decline in spending on legacy services will decrease towards the end of the forecast, resulting in higher spending growth via premium SMS in 2022–2023 and 2023–2024.

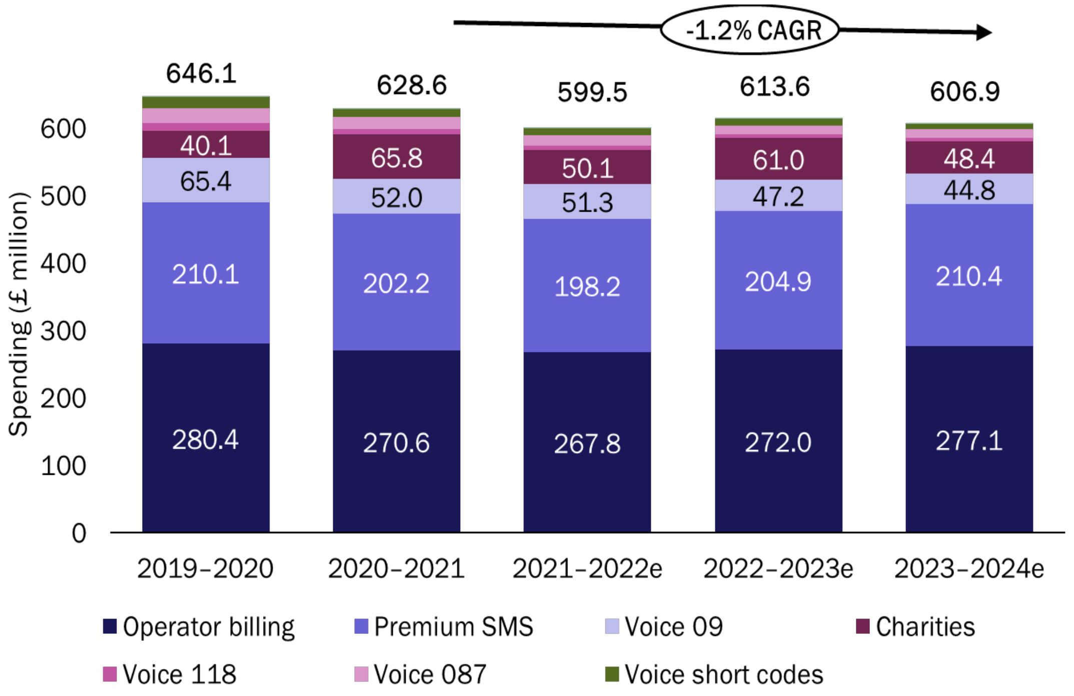
- **Charity donations will fluctuate as discussed**, primarily due to the seasonality of telethons (see Section 5.3). However, donations will gradually decline from the peak in 2020–2021, at which point overall giving was at an all-time high. Donation amounts will normalise after an initial downturn in 2021–2022 and the share of donations made outside of telethons (including recurring and single donations) is expected to increase from 25% in 2020-2021 to 28% in 2023–2024.

- **Spending via voice-based channels will continue to decline.** Voice-based services tend to be legacy in nature and often have cheaper or online alternatives. Furthermore, the size of the user bases for all voice-based services is declining. Voice 09 will have the highest spending levels of all voice-based channels; the spending on assistance services and broadcast engagement via the voice 09 channel will be significant and a core base of loyal users will remain but will still decline at a CAGR of –4.8% between 2020–2021 and 2023–2024. Voice 087 numbers remain under review by Ofcom, but we have assumed that they will not be terminated within the timeframe of our forecast because service providers will be allowed some time to move to other number ranges, even if a decision is made in the near future. Spending via this channel is declining at a CAGR of –10.0%. Spending via voice 118 numbers has fallen significantly in the last few years and the rate of decline is now slowing, but only to a CAGR of –16.5% to 2023–2024, which means that it is still the fastest of all channels. Spending via voice short codes is declining at a CAGR of –10.8%.

6.3 Spend by service category

TV and radio engagement, games and entertainment will remain the fastest growing and largest categories in terms of spending in the medium term. Spending on betting, gambling and lotteries will also grow in the next 3 years. Charity donations will continue to fluctuate, but spending on all other service categories will decline (Figure 6.3).

Figure 6.3: End-user spending (excluding VAT), by service category, UK, 2019–2020 to 2023–2024e (estimated)



Source: Analysys Mason and Phone-paid Services Authority, 2021

This forecast can be explained by considering the following key trends.

- **Spending on TV and radio engagement will grow to £196.6 million by the end of the forecast period**, by which point it will make up 32.4% of the phone-paid services market. Spending in this segment has grown significantly over the last few years and has so far appeared to be unaffected by the impacts of potential economic downturns, partly because broadcasters have shifted prize structures to better cater to consumers in a downturn. There has also been no real decrease in the number of users despite price rises (for radio competitions), though such rises are unlikely to continue. Spending growth will begin to slow as the segment eventually reaches saturation; audience numbers are expected to decline post-pandemic and the possibility of increasing the average spend per user is limited.

- **Spending on games and entertainment will grow to £119.8 million and £89.6 million, respectively, by 2023–2024.** The number of users of services in both of these categories increased during lockdown, but is expected to fall once the COVID-19 pandemic is fully behind us. However, not all new consumers will stop using these services, particularly due to the high quality of the services provided.

- **Spending on betting, gambling and lotteries will grow steadily to £67.9 million by 2023–2024.** The jump in spending in 2021–2022 is due to the return of year-round sports betting, and subsequent increases in spending are the result of organic growth and further prioritisation of phone-paid services as a payment method in the absence of credit cards (due to the Gambling Commission's ban on credit card gambling).

- **Charity donations will fluctuate throughout the forecast period.** Other services tend to fall into the legacy service category, with minima advertising and few alternatives. Spending on these services will decline consistently throughout the forecast period and beyond, though the rate of decline will slow as these services become limited to core users only.

7. Consumer analysis

Our survey of consumers implied that 54% of the British population aged 16 or above used phone-paid services in 2020–2021. The drivers of phone-paid service use were similar to those in 2019–2020: convenience was the most important driver, followed by impulse purchases and affordability. 25% of users reported problems with phone-paid services in 2020–2021, primarily when accessing or using a service. Both the scale and the nature of the problems reported were broadly consistent with what we observed last year. Problems were most likely to occur when using sexual entertainment, personal and relationship services and connection services; these three categories accounted for an increased share of respondents experiencing issues than in 2019–2020.

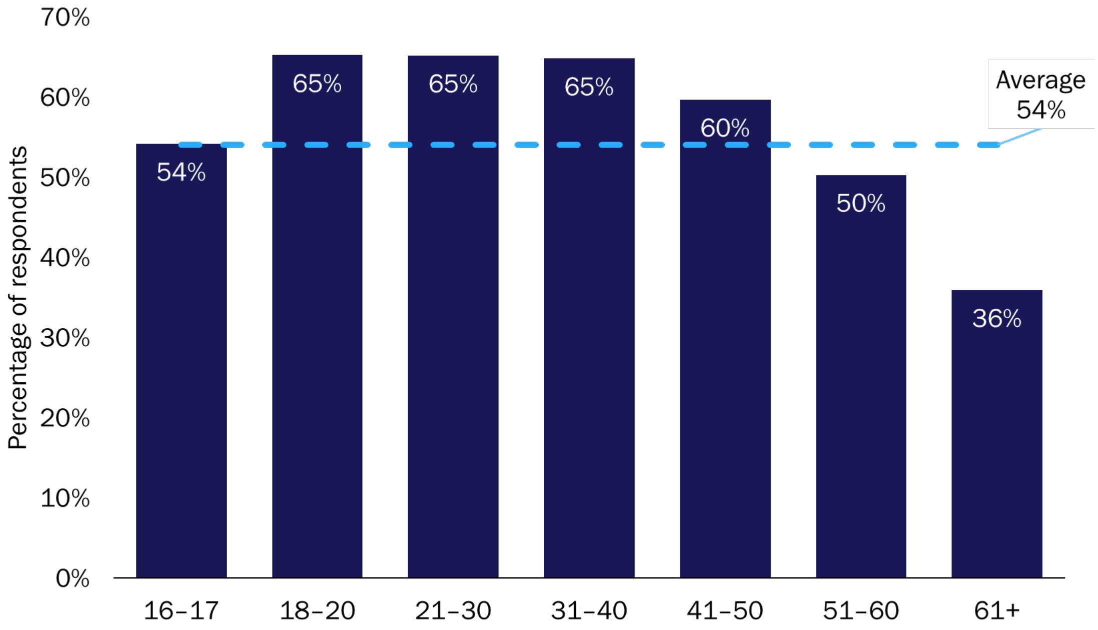
7.1 Demographics

Our survey of 9274 individuals indicates that phone-paid services were used by 54% of the British population (16 years of age or above) in 2020–2021 (a slight increase from the 52% reported in 2019–2020). Survey responses were collected online, which means that there may be a degree of bias towards consumers with a strong online presence who are more likely to consume digital content and services. As a result, the actual penetration of phone-paid services is likely to be slightly lower than what the survey results suggest.

We have aimed to maintain a consistent approach when gathering survey responses by using a nationally representative sample in terms of age band, gender and regional distribution. However, there are likely to be some differences in the make-up of the survey panel due to the nature of COVID-19-related lockdowns (for example, some people on furlough may have answered the survey this year but would have refused or not been made aware of the survey in previous years).

As observed last year, phone-paid service usage did not vary significantly by gender or region, but it did vary by age band. Figure 7.1 shows that service penetration was the highest among those aged 18–40 (65%); this is likely to be because many games and/or entertainment services appeal to a wide range of consumers in this age group. Penetration only dropped to 60% among 41–50-year-olds, but, in line with previous years, it was much lower among respondents aged 61 and above (36%) than for any other age group.

Figure 7.1: Penetration of phone-paid services, by age group, UK, 2020–2021[22]



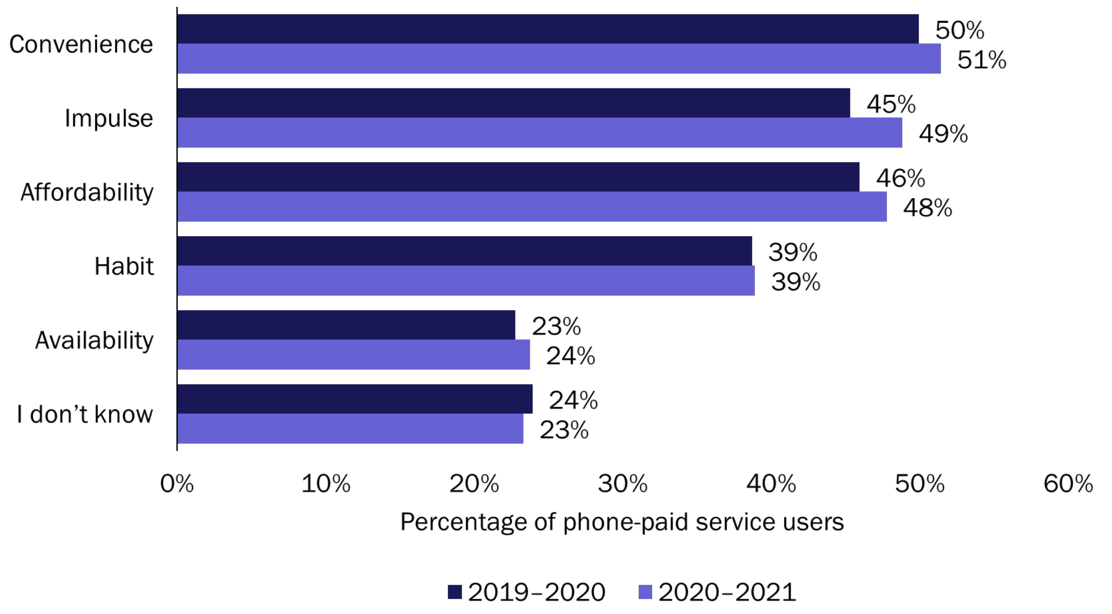
Source: Analysys Mason, 2021

7.2 Drivers of use

The drivers of phone-paid service use in 2020–2021 were largely the same as those in 2019–2020. Figure 7.2 shows that convenience was once again the most commonly cited driver (51% in 2020–2021, up from 50% in 2019–2020), closely followed by impulse purchases (slight increase from 45% to 49% year-on-year) and affordability (48%, up from 46%). 39% of respondents continue to use these services out of habit (same figure as last year), while the percentage of respondents that cited availability increased slightly from 23% to 24%. The general increase in the proportion of respondents selecting each driver suggests an overall higher availability of services valued by users, and the growth in the share of respondents citing impulse purchases and affordability indicates that some phone-paid services may be particularly competitive with lower-cost service offerings.

22 Question: "Based on your understanding of phone-paid services, which of the following categories of services have you used and paid for via your mobile phone bill or landline phone bill over the last 12 months?" [multiple choice] (*n* = 9274).

Figure 7.2: Drivers of phone-paid service use among phone-paid service users, UK, 2019–2020 and 2020–2021[23]



Source: Analysys Mason, 2021

Interviews with industry participants suggest that consumer confidence in phone-paid services continually increases year-on-year. Service providers with questionable reputations continue to leave the market thanks to special conditions imposed by the Phone-paid Services Authority on subscription services that act as deterrents to scams and poor-quality services. In addition, operators have continued to retire services that have generated significant numbers of complaints in the past. The launch of the phonecharges.org website by the Association for Interactive Media and Micropayments (AIMM) in January 2021 is a step towards improving the consumer awareness of phone-paid services. The site provides information about all phone-paid services and explains how customers should react to unfamiliar charges on their phone bills. Raising awareness of the ability to look up services should reduce the number of customers who see an unexpected charge and believe that they have been scammed. However, a few industry stakeholders pointed out that queues for customer support helplines had lengthened, especially during the first lockdown (from March 2020) when many mobile operators' customers were unable to resolve issues in-store, and when call centres had likely limited capacities. Users who experienced these queues were likely to be put off by the lengthy waits and potentially higher-than-expected costs for premium-rate voice lines.

7.3 Problems and impact

Key problems encountered

25% of survey respondents who used phone-paid services in 2020–2021 reported encountering a problem with at least one service. This represents a slight increase since 2019–2020, but the overall complaint level has remained largely steady at around 25% since the 2018–2019 annual market review. 2 years with a broadly

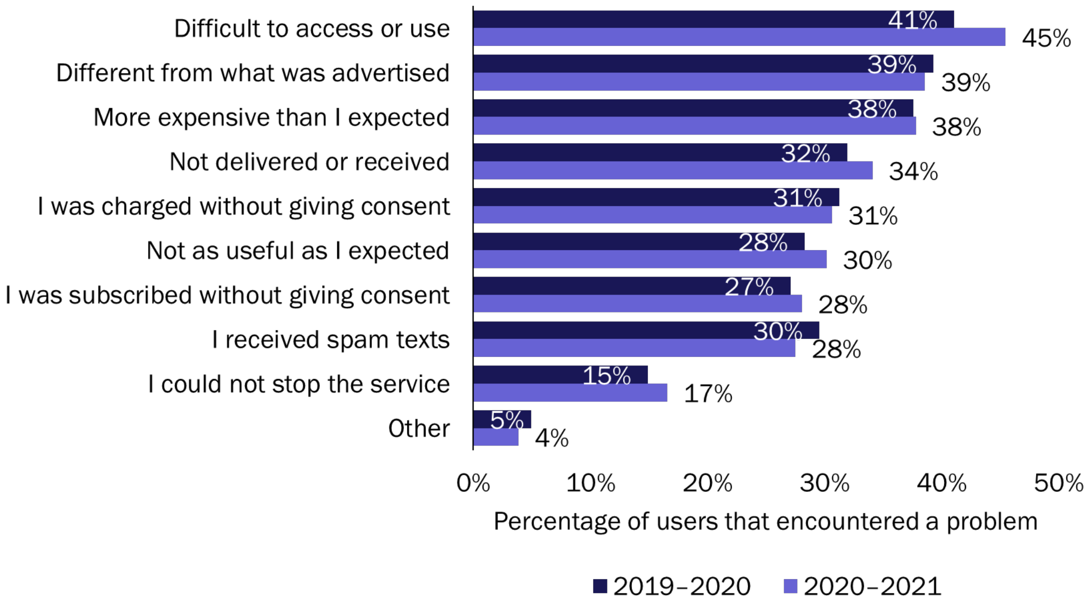
23 Question: "Why did you use the service/content?" [multiple choice] (*n* = 5014; only respondents who have used the listed phone-paid services in the past 12 months).

similar level of complaints may not represent the improvements that some stakeholders feel have been achieved, but it remains a largely positive result.

Difficulties in accessing or using services was again the most commonly cited problem by survey respondents (45% in 2020–2021, up from 41% in 2019–2020), followed by a perceived difference between the service received and what was advertised (39%) and a higher price than expected (38%) (Figure 7.3). The introduction of phonecharges.org by AIMM in January 2021 may reduce the proportion of users experiencing these issues going forward. In addition, Ofcom's ongoing review into the future of 087 numbers may have an impact on 'bill shock' from poorly advertised access charges on premium rate voice services.

It is surprising that the proportion of users being charged or subscribed without giving consent did not decline considering the introduction of special conditions on subscription-based services by the Phone-paid Services Authority in November 2019, though the results may reflect a lag effect (see more details below).

Figure 7.3: Share of respondents that encountered a problem, by type of problem, UK, 2019–2020 and 2020–2021[24]



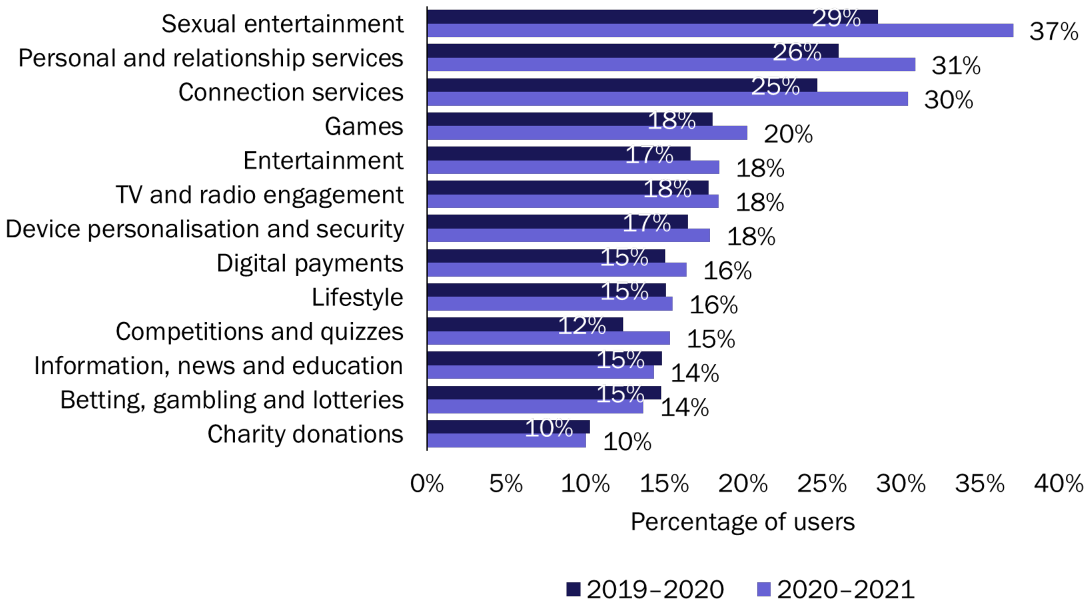
Source: Analysys Mason, 2021

Similar to last year, sexual entertainment, personal and relationship services and connection services resulted in problems for the largest proportion of respondents (37%, 31% and 30%, respectively) (Figure 7.4). This is probably due to a minority of disreputable service providers seeking to deceive customers through misrepresentation of the services provided. Industry participants suggested that regulatory work carried out by the Phone-paid Service Authority has been successful in preventing these types of companies from gaining a foothold in the market, though it may be difficult to completely eradicate the problem. Subscription services remain more likely to cause problems in every service category, but the difference between the share of problems caused by one-off services and the share of problems caused by subscription services was much

24 Question: "Can you please identify from the following what this (these) problem(s) was (were)?" [multiple choice] (*n* = 1276; only respondents who have used the listed phone-paid services in the past 12 months and encountered a problem with at least one service).

smaller than last year (4%, compared to 23% last year), which indicates that the Phone-paid Service Authority's regulation has had some impact. However, the overall scale of the impact has remained limited because far more survey respondents use one-off services than subscription-based services, and there is likely to be a lag before the full impact of the regulation is felt. Several industry stakeholders have commented on the lag between problems occurring and consumers noticing the issues with their subscription services (some consumers complain about being subscribed to services months or years after the event), so it is reasonable to expect a similar lag in the realisation of the full benefits of the regulation.

Figure 7.4: Share of respondents that encountered a problem, by service category, UK, 2019–2020 and 2020–2021[25]

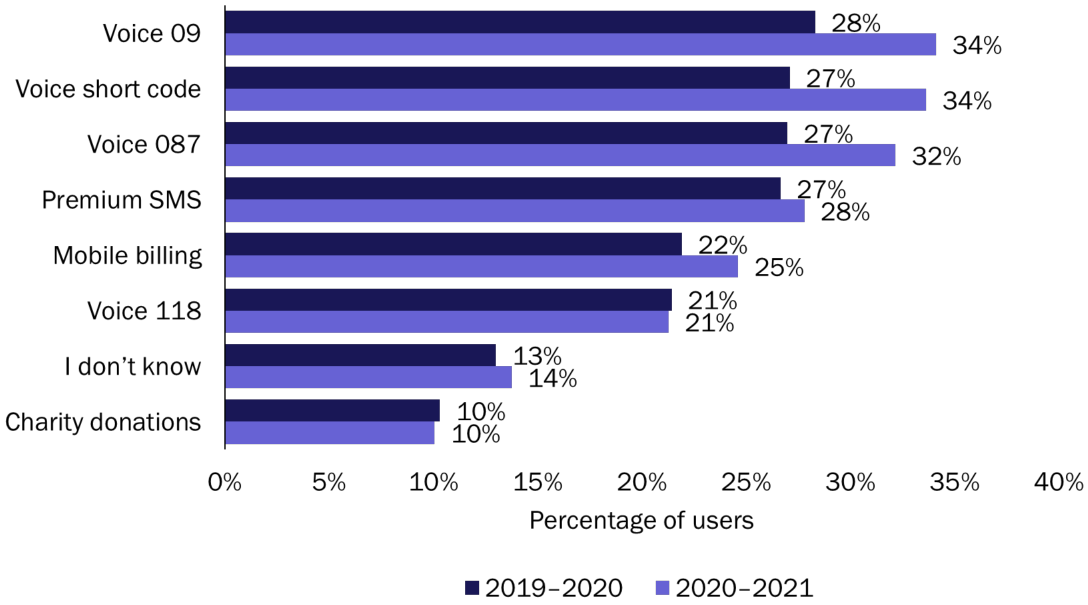


Source: Analysys Mason, 2021

Voice-based services using the 09 numbering range were the most likely to cause a problem for users (34% of users encountered an issue), followed by voice short code services (34%) and voice 087 services (32%). Figure 7.5 shows that these three channels accounted for the majority of problems last year too, though to a lesser extent. The percentage of problems caused by premium SMS, charity donations and voice 118 services has remained stable year-on-year; this is a good outcome for voice 118 services in particular because the proportion of complaints for this channel increased between 2018–2019 (19%) and 2019–2020 (21%). This may be indicative of the impact of price caps and the subsequent reduction in the promotion of less-reputable 118 services.

25 Question: "Have you experienced any problem(s) when using the service in the past 12 months?" (*n* = variable; respondents who have used any phone-paid service from the listed categories in the past 12 months).

Figure 7.5: Share of respondents that encountered a problem, by spending channel, UK, 2019–2020 and 2020–2021[26]



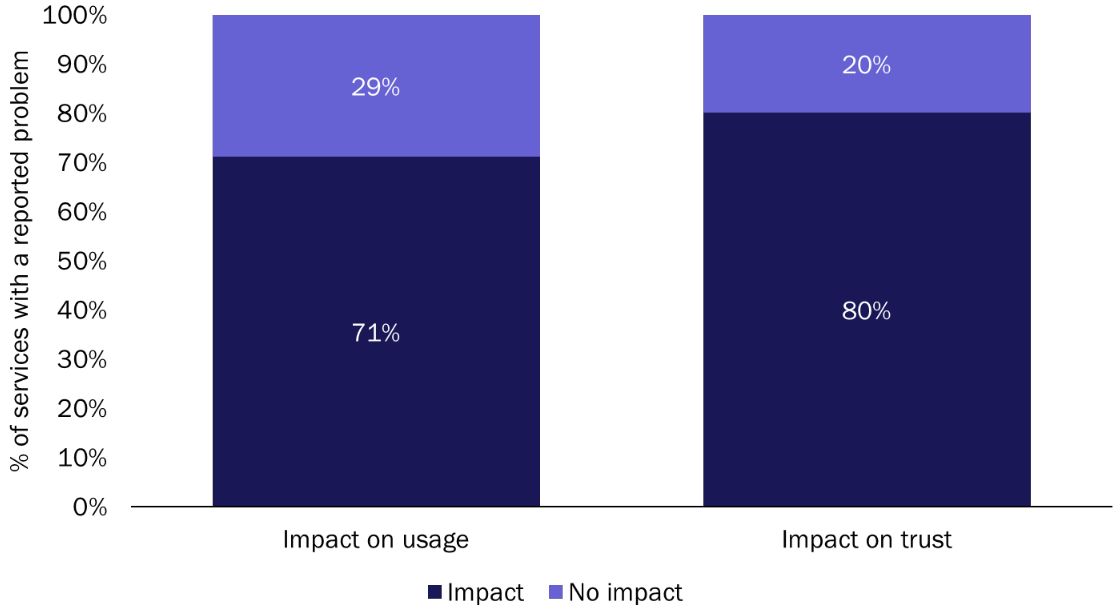
Source: Analysys Mason, 2021

Impact of problems on usage and trust

80% of respondents that encountered issues reported that these problems had an impact on their trust in the service. This result is very similar to the 79% seen in our survey last year, and the impact of problems on usage was also similar: 71% of users reported that their problem had resulted in decreased usage, compared to 69% last year (Figure 7.6).

26 Question: "Have you experienced any problem(s) when using the service in the past 12 months?" (*n* = variable; respondents who have used the listed phone-paid service channels in the past 12 months).

Figure 7.6: Impact of a problem on a respondent's usage of and trust in a service, UK, 2020–2021[27]



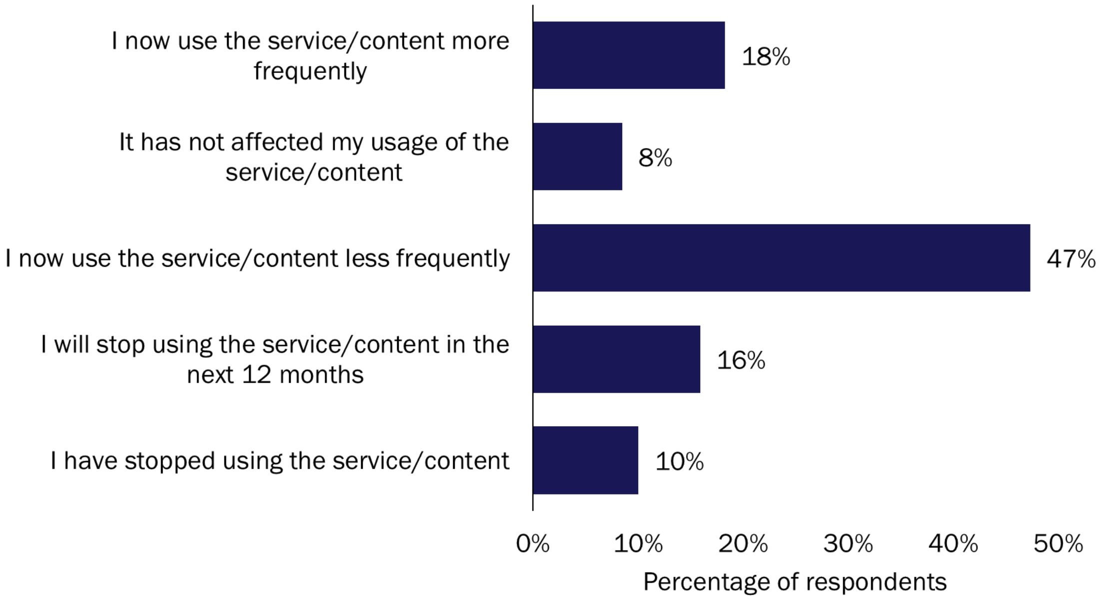
Source: Analysys Mason, 2021

7.4 Impact of the COVID-19 pandemic on usage

As discussed throughout this report, the impact of the COVID-19 pandemic was felt across a wide range of industries in 2020–2021 and phone-paid services were no exception. Indeed, 47% of respondents to our survey indicated that they reduced their use of phone-paid services as a result of the pandemic, and a further 10% stated that they no longer use services. Conversely, only 8% of respondents said that their usage was unaffected and 18% increased their usage (Figure 7.7). This trend did not appear to vary significantly between service categories. The gap between the percentage of respondents that decreased their usage and the percentage of respondents that increased their usage was the lowest for entertainment and lifestyle services; these two categories also had the highest percentage of respondents reporting that they had increased usage. This is likely to be because increased use of these services aligns with an increase in the amount of time spent at home.

27 *n* = 7663; total number of services with which respondents encountered at least one problem.

Figure 7.7: Impact of the COVID-19 pandemic on service usage, UK, 2020-2021[28]



Source: Analysys Mason, 2021

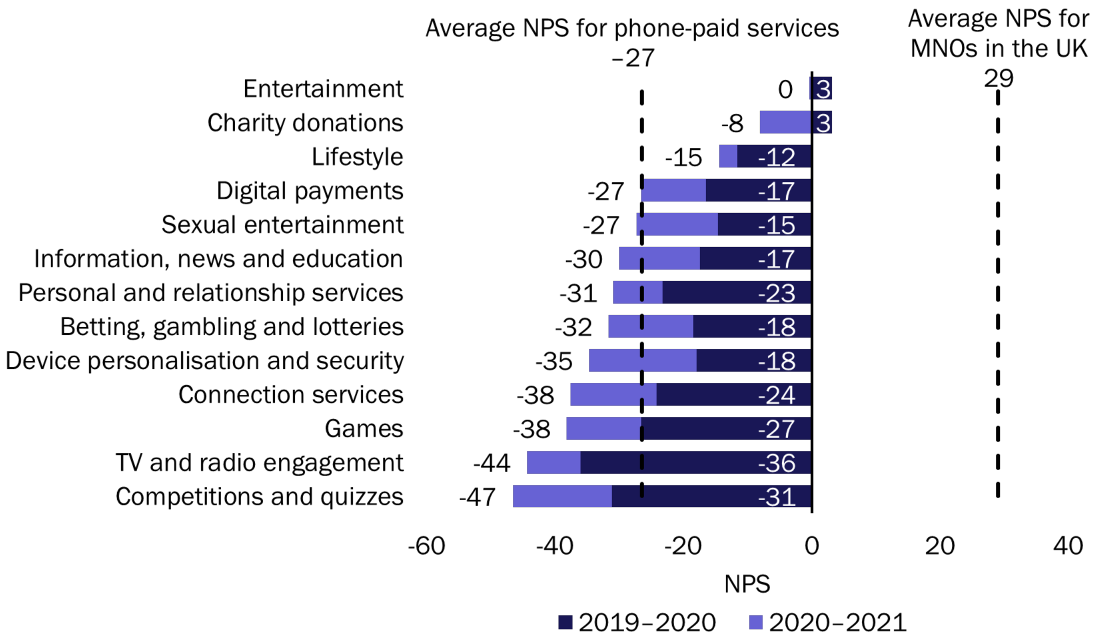
7.5 Net Promoter Score (NPS)

The NPS is an industry standard index to measure the willingness of customers to recommend products or services to others. It is calculated by estimating the number of promoters and detractors each service has, based on how users respond to the question “On a scale from 1 (‘not at all likely’) to 10 (‘definitely’), how likely are you to recommend each service to friends or family members?” The NPS is calculated by subtracting the percentage of detractors (respondents scoring 0–6) from the percentage of promoters (respondents scoring 9–10).

The overall NPS for phone-paid services in 2020–2021 was –27, which is significantly lower than the NPS for 2019–2020 (–17). The NPS also fell for every category this year. Figure 7.8 shows that the entertainment category had the highest NPS (–0.4, down from 3 last year), followed by charity donations (–8, down from –3 last year). Lifestyle was the only other category to have an NPS of above –27 (–15, compared to –12 last year). The worst-performing categories are TV and radio engagement (with an NPS of –44, down from –36 last year) and competitions and quizzes (NPS of –47, down from –31 last year), though these types of services consistently perform badly – the majority of users do not win these competitions and are likely to be more negative as a result. For other types of services, poor product quality and / or poor customer service are likely to be key drivers of low NPS.

28 *n* = 27 747; total number of phone-paid services that respondents have used in the past 12 months.

Figure 7.8: Net Promoter Score, by service category, UK, 2019–2020 and 2020–2021



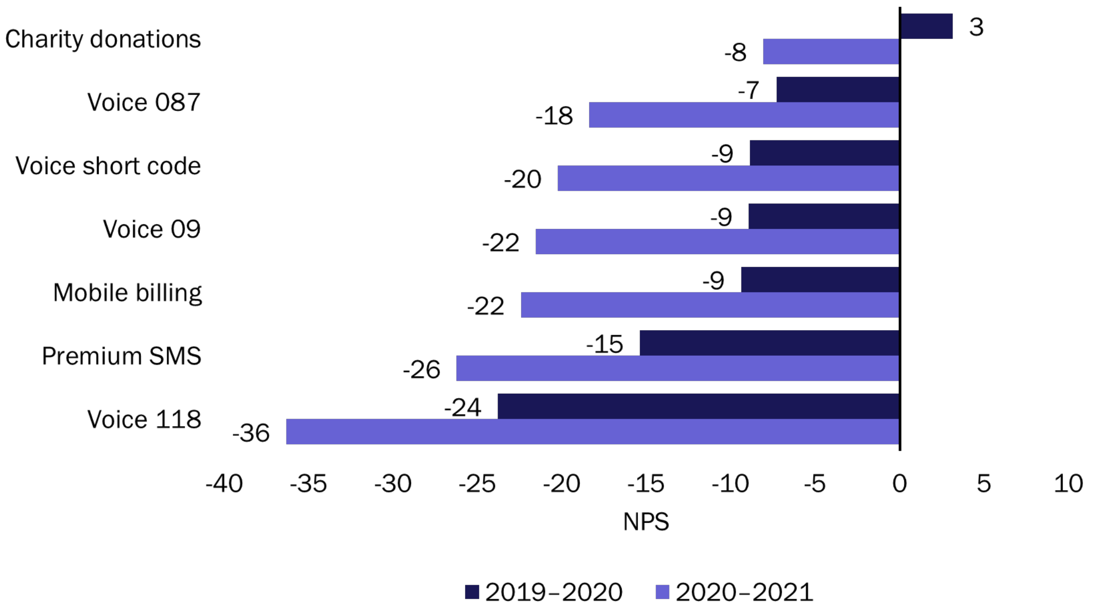
Source: Analysys Mason, 2021

The results are surprising given that the proportion of consumers that experience problems with their services remains relatively stable year-on-year. One possible explanation for the decline in NPS is a generally lower level of happiness among consumers in 2020–2021 compared to in 2019–2020 as a result the COVID-19 pandemic. Consumers are perhaps therefore less likely to make positive recommendations of the services that they are using. Indeed, the XM institute observed a dramatic decline in NPSs in the USA during the pandemic; the NPS declined for every industry that it follows (for example, the NPS for credit card firms fell by 28 points, that for computer/tablet companies fell by 15 points, that for software firms fell by 13 points and that for media streaming companies fell by 10 points).[29] This cross-industry decline supports our hypothesis that the decline in NPS for phone-paid services is to some degree related to the COVID-19 pandemic. Furthermore, our survey was conducted between March and April 2021, during the third (and longest) lockdown in the UK. The overall mood of the country was noticeably lower at this time, which may have been a factor in the lower NPSs: less happy consumers are less likely to recommend services, even if unhappiness is not related to the services themselves.

The NPSs for mobile billing and voice 09 services declined the most out of all spending channels (–22 compared to –9 last year for both), followed by voice 118 services (–36 compared to –24 last year). The NPS for premium SMS fell the least, but only just (–26 compared to –15 last year) (Figure 7.9).

29 The XM institute is an experience management company that tracks NPSs in 20 US industries. Results are based on 110 000 data points from 10 000 consumers. A summary can be seen at: https://www.xminstitute.com/blog/nps-collapses-pandemic/.

Figure 7.9: Net Promoter Score, by spending channel, UK, 2019–2020 and 2020–2021



Source: Analysys Mason, 2021

Annex A Service taxonomy and data

This section contains a taxonomy of the phone-paid services assessed in this market review, as well as additional market data on a per-service basis.

A.1 Service taxonomy

This annual market review uses the same service taxonomy that was used in the 2019–2020 report. It includes 13 service categories broken down into 48 service types (Figure A.1).

Figure A.1: Phone-paid services taxonomy, by service category and type, 2020–2021

Service category	Service type	Definition
Assistance services	Directory enquiries	• Voice service used to find out a specific phone number and/or address of a residence, business or public entity. • Accessed and paid for via a premium rated six-digit number beginning with 118.
	Customer services	• Voice service to contact the customer service of an organisation. • Accessed and paid for via a premium-rated number beginning with 087 or 09, or presented as a voice short code.
	Information, connection and/or signposting services (ICSS)	• Voice service to contact a specific business or service (for example, a lawyer or solicitor). • Accessed and paid for via a premium-rated number beginning with 087 or 09.
Betting, gambling and lotteries	Betting	• Entry to a sport-related competition to win prizes (for example, via an event, bookmaker or online). • Paid for via premium SMS or operator billing.
	Gambling	• Entry to a game of chance to win prizes (for example, mobile casino, arcade or bingo). Excludes bets and lotteries. • Paid for via premium SMS or operator billing.
	Lotteries	• Entry to a lottery/tombola, typically organised by a business, charity or society to raise money. • Paid for via premium SMS or operator billing.
Charity donations	Charity donations	• Text-based donation to a charity (as part of a televised event, regular donations collected by charities or specific appeals during humanitarian crises). • Paid for via premium SMS.
Competitions and quizzes	Online competitions	• Entry to competitions advertised online (for example, on a website or through email marketing). Excludes competitions run by TV or radio broadcasters. • Paid for via premium SMS or operator billing.
	Offline competitions	• Entry to competitions advertised offline (for example, on TV, in newspapers or on public billboards). Excludes competitions run by TV or radio broadcasters. • Paid for via premium SMS or using a premium-rated number beginning with 09.
	Ringtones, ring-back tones and wallpapers	• Purchase and download of ringtones, ring-back tones and wallpapers for device personalisation.

Service category	Service type	Definition
Device personalisation and security		• Paid for via premium SMS or operator billing.
	Security	• Purchase and download of software to protect a mobile device (for example, from viruses, hackers or other malware). • Paid for via premium SMS or operator billing.
Digital payments	Vouchers	• Purchase of discount codes (for example, that can be used at a retailer or supermarket). • Paid for via premium SMS or operator billing.
	Virtual gifts	• Purchase of virtual gifts on social media websites (such as virtual flowers). • Paid for via premium SMS or operator billing.
	Gift cards	• Purchase of gift cards (for example, to use at a retailer or supermarket). • Paid for via premium SMS or operator billing.
	Low-cost international or reverse-charge calls	• Alternative call services, typically with a charge per minute. • Accessed and paid for via a premium-rated number beginning with 087 or 09, or presented as a voice short code.
Entertainment	Music	• Subscription to music streaming services or one-off download of songs or music albums. • Paid for via premium SMS or operator billing.
	TV	• Subscription to niche TV channels or one-off download of TV shows. • Paid for via premium SMS or operator billing.
	Video	• Subscription to video streaming services or one-off download of short videos. • Paid for via premium SMS or operator billing.
	Film	• Subscription to film bundles/channels or one-off download of individual films. • Paid for via premium SMS or operator billing.
	Books	• Subscriptions to, or one-off downloads of, books and magazines. • Paid for via premium SMS or operator billing.
Games	Games downloaded from an app store	• Purchase and download of games from an online store (including app stores such as Apple App Store or Google Play, large online games stores such as PlayStation Store or Microsoft Store, as well as other small independent online games portals). • Paid for via operator billing.
	Games played on social media	• Access to games playable on social media websites. • Paid for via premium SMS or operator billing.
	Games bundled as part of a monthly subscription	• Subscription service for games downloads (unlimited or limited to a certain number of games per time period) from online games portals. • Paid for via premium SMS or operator billing.
	In-game purchases	• Purchase of in-game items or rewards (for example, boosters, lives or customisable content), or the premium version of a free-to-play game (for example, with no ads or with expanded game content). • Paid for via premium SMS or operator billing.
	In-game credit top-ups	• Purchase of in-game credit, such as in-game currency (for example, gold or gems), that can be used to purchase in-game items or rewards. • Paid for via premium SMS or operator billing.
	Weather	• Voice service used to access weather information.

Service category	Service type	Definition
Information, news and education		• Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code.
	News	• Voice service used to access news. • Accessed and paid for via a premium-rated number beginning with 087, 09 or presented as a voice short code.
	Travel	• Voice service used to access travel information. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code.
	Sport	• Voice service used to access information on sports results. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code.
	Stocks and shares	• Voice service used to access information on stocks/shares. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code.
	Alerts	• Service used to set up alerts at specific times. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code, via premium SMS or through operator billing.
	Educational services	• Service used to access information on educational services. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code, or accessed online and paid for through operator billing.
Lifestyle	Fitness, health and wellbeing	• Service used to access information, tips, advice or reminders on nutrition, dieting and exercise. • Paid for via premium SMS or operator billing.
	Food and recipes	• Subscription to, or one-off downloads of, information on foods and recipes. • Paid for via operator billing.
Personal and relationship services	Dating	• Access to dating services or in-app purchases (for example, credit or premium messaging) in free-to-use dating services. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code, via premium SMS or through operator billing.
	Flirting chat services	• Voice- or message-based (non-explicit) flirting chat with a service operator. • Accessed and paid for via a premium-rated number (beginning with 087, 09, or presented as a voice short code), via premium SMS or through operator billing.
	Chat services	• Voice- or message-based chat with a helpline or friendship service. Excludes flirting chat services. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code, via premium SMS or through operator billing.
	Tarot/astrology services	• Service used to access services such as horoscopes and tarot card readings. • Accessed and paid for via a premium-rated number beginning with 087, 09, or presented as a voice short code, via premium SMS or through operator billing.
	Glamour pics	• Access to and/or downloads of revealing or nude photos.

Service category	Service type	Definition
Sexual entertainment		• Paid for via premium SMS or operator billing.
	Adult pics	• Access to and/or downloads of hardcore and explicit photos. • Paid for via premium SMS or operator billing.
	Adult videos	• Access to and/or downloads of hardcore and explicit videos. • Paid for via premium SMS or operator billing.
	Adult cams	• Purchase of tokens to access online video streams. • Paid for via premium SMS or operator billing.
	Adult chat (messaging)	• Message-based (explicit) chat service. • Paid for via premium SMS or operator billing.
	Adult talk services (voice)	• Voice-based (explicit) chat service. • Accessed and paid for via a premium-rated number (beginning with 087, 09, or presented as a voice short code).
TV and radio engagement	Radio broadcaster competitions	• Entry to an (online or offline) competition run by a radio broadcaster. • Paid for via premium SMS or operator billing, or using a premium-rated number beginning with 09 or presented as a voice short code.
	TV broadcaster competitions	• Entry to an (online or offline) competition run by a TV broadcaster. • Paid for via premium SMS or operator billing, or using a premium-rated number beginning with 09 or presented as a voice short code.
	Voting on a TV/radio show	• Voting in the context of a TV or radio show (for example, voting for a favourite candidate). • Paid for via premium SMS or using a premium-rated number presented as a voice short code.
	Texting in to a show host	• Text-based engagement with the presenter of a TV or radio show. • Paid for via premium SMS.

Source: Analysys Mason, 2021

A.2 Service-level data

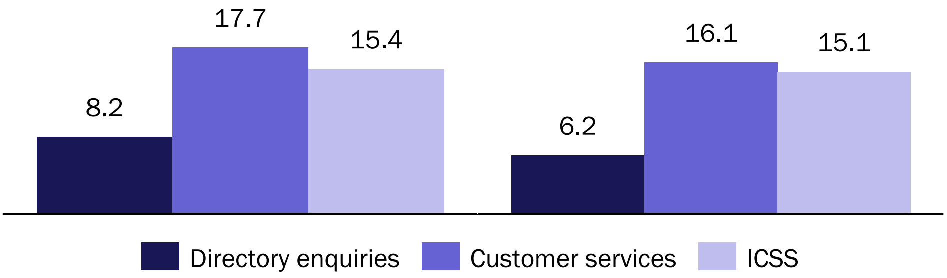
This section provides the following additional market data across the 13 service categories.

- The spend by service type for each service category in 2020–2021 and 2021–2022, and the associated year-on-year growth rates.
- The spend, number of users, implied yearly average spend per user (ASPU), the share of users that have reported encountering a problem in the previous 12 months, the share of users that have had their trust impacted as a result of encountering a problem and the NPS for each service type.

ASSISTANCE SERVICES

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£41.3 million**	SPEND **£37.5 million**



DIRECTORY ENQUIRIES

2020-2021

SPEND **£8.2 million**	USERS **0.7 million**	ASPU **£12.5**
21% Users w/problems	**12%** Users w/trust impacted	**- 38** NPS score

CUSTOMER SERVICES

2020-2021

SPEND **£17.7 million**	USERS **2.3 million**	ASPU **£7.8**
27% Users w/problems	**12%** Users w/trust impacted	**- 46** NPS score

INFORMATION, CONNECTION AND/OR SIN+GNPSOTING SERVICES (ICSS)

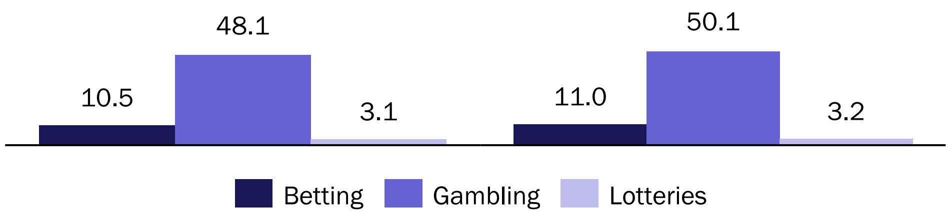
2020-2021

SPEND **£15.4 million**	USERS **1.2 million**	ASPU **£12.7**
38% Users w/problems	**25%** Users w/trust impacted	**- 25** NPS score

BETTING, GAMBLING & LOTTERIES

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£61.8 million**	SPEND **£64.4 million**



BETTING

2020-2021

SPEND **£10.5 million**	USERS **2.4 million**	ASPU **£4.3**
13% Users w/problems	**7%** Users w/trust impacted	**- 33** NPS score

GAMBLING

2020-2021

SPEND **£48.1 million**	USERS **3.1 million**	ASPU **£15.3**
14% Users w/problems	**10%** Users w/trust impacted	**- 40** NPS score

LOTTERIES

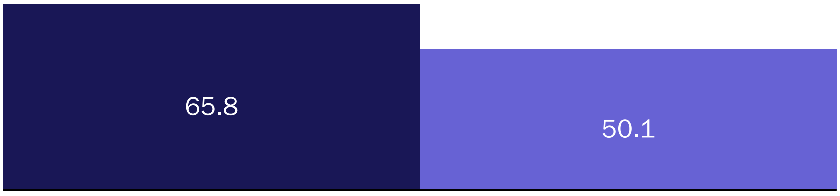
2020-2021

SPEND **£3.1 million**	USERS **1.3 million**	ASPU **£2.4**
11% Users w/problems	**7%** Users w/trust impacted	**- 24** NPS score

CHARITY DONATIONS

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£65.8 million**	SPEND **£50.1 million**



DONATIONS

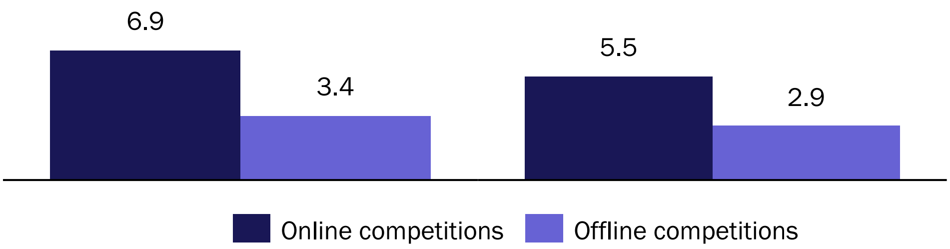
2020-2021

SPEND	USERS	ASPU
£65.8 million	**7.7 million**	**£8.5**
10% Users w/problems	6% Users w/trust impacted	- 8 NPS score

COMPETITIONS & QUIZZES

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£10.2 million**	SPEND **£8.4 million**



ONLINE COMPETITIONS

2020-2021

SPEND **£6.9 million**	USERS **0.1 million**	ASPU **£51.1**
15% Users w/problems	**8%** Users w/trust impacted	**- 41** NPS score

OFFLINE COMPETITIONS

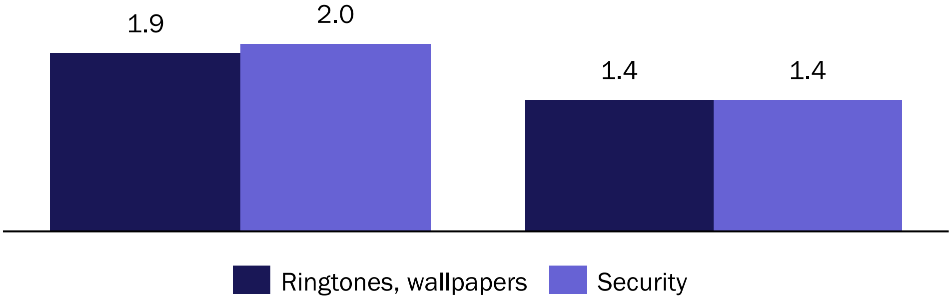
2020-2021

SPEND **£3.4 million**	USERS **1.2 million**	ASPU **£2.8**
14% Users w/problems	**7%** Users w/trust impacted	**- 54** NPS score

DEVICE PERSONALISATION & SECURITY

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£4.0 million**	SPEND **£2.8 million**



RINGTONES, WALLPAPERS

2020-2021

SPEND **£1.9 million**	USERS **1.3 million**	ASPU **£1.5**
12% Users w/problems	**6%** Users w/trust impacted	**- 46** NPS score

SECURITY

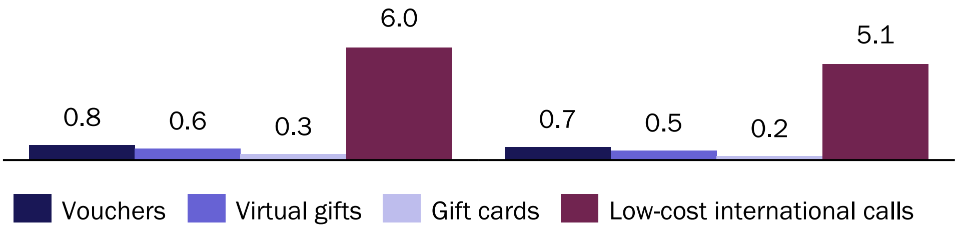
2020-2021

SPEND **£2.0 million**	USERS **0.7 million**	ASPU **£3.0**
24% Users w/problems	**12%** Users w/trust impacted	**- 18** NPS score

DIGITAL PAYMENTS

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£7.7 million**	SPEND **£6.4 million**



VOUCEHRS

2020-2021

SPEND **£0.8 million**	USERS **0.2 million**	ASPU **£3.5**
14% Users w/problems	**6%** Users w/trust impacted	**- 28** NPS score

VIRTUAL GIFTS

2020-2021

SPEND **£0.6 million**	USERS **0.8 million**	ASPU **£0.7**
20% Users w/problems	**7%** Users w/trust impacted	**- 25** NPS score

GIFT CARDS

2020-2021

SPEND **£0.3 million**	USERS **0.3 million**	ASPU **£1.0**
12% Users w/problems	**6%** Users w/trust impacted	**- 25** NPS score

LOW-COST INTERNATIONAL CALLS

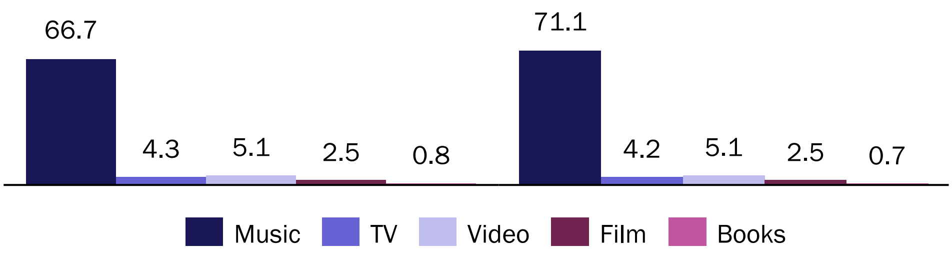
2020-2021

SPEND **£6.0 million**	USERS **0.7 million**	ASPU **£9.0**
28% Users w/problems	**16%** Users w/trust impacted	**- 32** NPS score

ENTERTAINMENT

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£79.4 million**	SPEND **£83.7 million**



MUSIC

2020-2021

SPEND **£66.7 million**	USERS **1.3 million**	ASPU **£52.1**
11% Users w/problems	5% Users w/trust impacted	+ 11 NPS score

TV

2020-2021

SPEND **£4.3 million**	USERS **0.9 million**	ASPU **£5.0**
22% Users w/problems	11% Users w/trust impacted	- 6 NPS score

VIDEO

2020-2021

SPEND **£5.1 million**	USERS **1.5 million**	ASPU **£3.4**
12% Users w/problems	5% Users w/trust impacted	- 9 NPS score

FILM

2020-2021

SPEND **£2.5 million**	USERS **1.0 million**	ASPU **£2.6**
17% Users w/problems	8% Users w/trust impacted	+ 5 NPS score

BOOKS

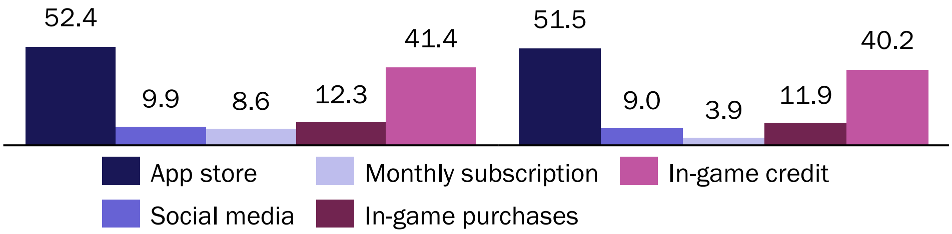
2020-2021

SPEND **£0.8 million**	USERS **0.2 million**	ASPU **£3.8**
11% Users w/problems	5% Users w/trust impacted	- 6 NPS score

GAMES

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£124.6 million**	SPEND **£116.5 million**



GAMES FROM APP STORE

2020-2021

SPEND **£52.4 million**	USERS **7.6 million**	ASPU **£6.9**
12% Users w/problems	**5%** Users w/trust impacted	**- 36** NPS score

PLAYED ON SOCIAL MEDIA

2020-2021

SPEND **£9.9 million**	USERS **3.3 million**	ASPU **£3.0**
21% Users w/problems	**9%** Users w/trust impacted	**- 36** NPS score

GAMES BUNDLED AS PART OF MONTHLY SUBSCRIPTION

2020-2021

SPEND **£8.6 million**	USERS **0.2 million**	ASPU **£34.6**
23% Users w/problems	**14%** Users w/trust impacted	**- 28** NPS score

IN-GAME PURCHASES

2020-2021

SPEND **£12.3 million**	USERS **2.9 million**	ASPU **£4.3**
19% Users w/problems	**10%** Users w/trust impacted	**- 50** NPS score

IN-GAME CREDIT TOP-UP

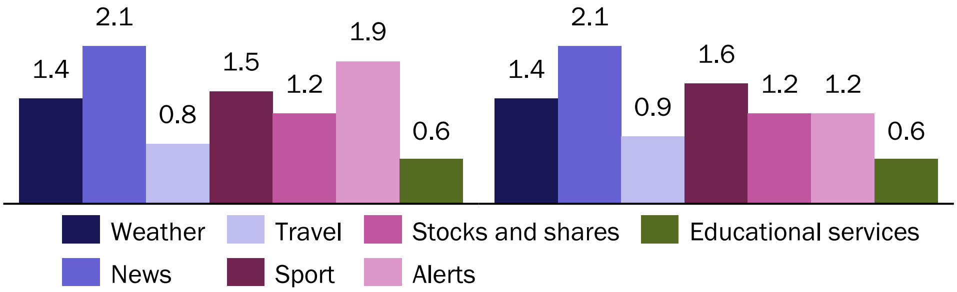
2020-2021

SPEND **£41.4 million**	USERS **3.3 million**	ASPU **£12.4**
19% Users w/problems	**9%** Users w/trust impacted	**- 42** NPS score

INFORMATION, NEWS & EDUCATION

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£9.5 million**	SPEND **£8.9 million**



WEATHER

2020-2021

SPEND **£1.4 million**	USERS **0.3 million**	ASPU **£5.0**
7% Users w/problems	**3%** Users w/trust impacted	**- 36** NPS score

NEWS

2020-2021

SPEND **£2.1 million**	USERS **0.3 million**	ASPU **£6.9**
6% Users w/problems	**3%** Users w/trust impacted	**- 32** NPS score

TRAVEL

2020-2021

SPEND **£0.8 million**	USERS **0.2 million**	ASPU **£4.7**
11% Users w/problems	**6%** Users w/trust impacted	**- 33** NPS score

SPORT

2020-2021

SPEND **£1.5 million**	USERS **0.2 million**	ASPU **£8.4**
10% Users w/problems	**4%** Users w/trust impacted	**- 20** NPS score

Category	Period	Spend	Users	ASPU	Users w/problems	Users w/trust impacted	NPS score
STOCKS & SHARES	2020-2021	£1.2 million	0.1 million	£16.7	15%	6%	- 26
ALERTS	2020-2021	£1.9 million	0.3 million	£5.3	16%	8%	- 38
EDUCATIONAL SERVICES	2020-2021	£0.6 million	0.1 million	£6.0	16%	7%	- 19

LIFESTYLE

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£24.8 million**	SPEND **£22.1 million**

FITNESS, HEALTH & WELLBEING

2020-2021

SPEND **£20.7 million**	USERS **0.5 million**	ASPU **£38.6**
15% Users w/problems	**8%** Users w/trust impacted	**- 9** NPS score

FOOD & RECIPES

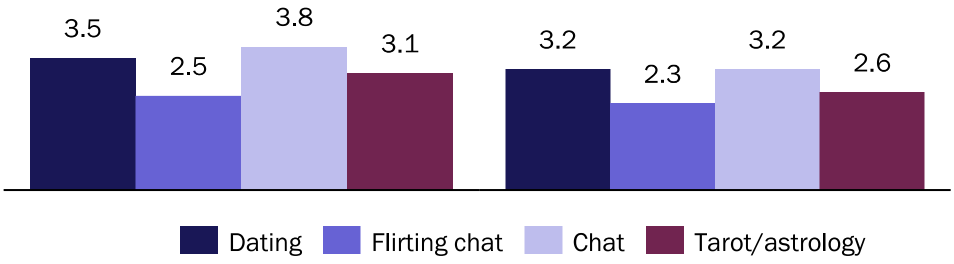
2020-2021

SPEND **£4.1 million**	USERS **0.6 million**	ASPU **£7.1**
12% Users w/problems	**5%** Users w/trust impacted	**- 21** NPS score

PERSONAL & RELATIONSHIP SERVICES

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£12.8 million**	SPEND **£11.4 million**



DATING

2020-2021

SPEND **£3.5 million**	USERS **0.4 million**	ASPU **£9.1**
22% Users w/problems	**13%** Users w/trust impacted	**- 39** NPS score

FLIRTING CHAT SERVICES

2020-2021

SPEND **£2.5 million**	USERS **0.2 million**	ASPU **£10.6**
32% Users w/problems	**20%** Users w/trust impacted	**- 28** NPS score

CHAT SERVICES

2020-2021

SPEND **£3.8 million**	USERS **0.5 million**	ASPU **£8.1**
34% Users w/problems	**16%** Users w/trust impacted	**- 27** NPS score

TAROT/ ASTROLOGY

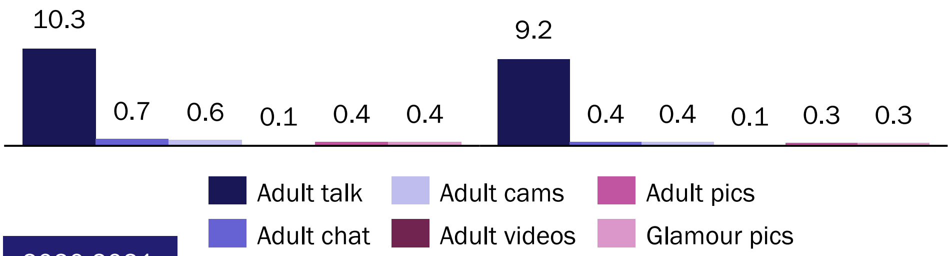
2020-2021

SPEND **£3.1 million**	USERS **0.1 million**	ASPU **£22.2**
37% Users w/problems	**20%** Users w/trust impacted	**- 27** NPS score

SEXUAL ENTERTAINMENT

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND **£12.4 million**	SPEND **£10.6 million**



ADULT TALK SERVICES

2020-2021

SPEND **£10.3 million**	USERS **0.3 million**	ASPU **£31.5**
46% Users w/problems	**27%** Users w/trust impacted	**- 11** NPS score

ADULT CHAT (MESSAGING)

2020-2021

SPEND **£0.7 million**	USERS **0.1 million**	ASPU **£5.0**
35% Users w/problems	**21%** Users w/trust impacted	**- 33** NPS score

ADULT CAMS

2020-2021

SPEND **£0.6 million**	USERS **0.1 million**	ASPU **£4.0**
43% Users w/problems	**21%** Users w/trust impacted	**- 24** NPS score

ADULT VIDEOS

2020-2021

SPEND **£0.1 million**	USERS **<0.1 million**	ASPU **£27.5**
29% Users w/problems	**17%** Users w/trust impacted	**- 33** NPS score

ADULT PICS

2020-2021

SPEND	USERS	ASPU
£0.4 million	0.2 million	£1.7
24% Users w/problems	19% Users w/trust impacted	- 25 NPS score

GLAMOUR PICS

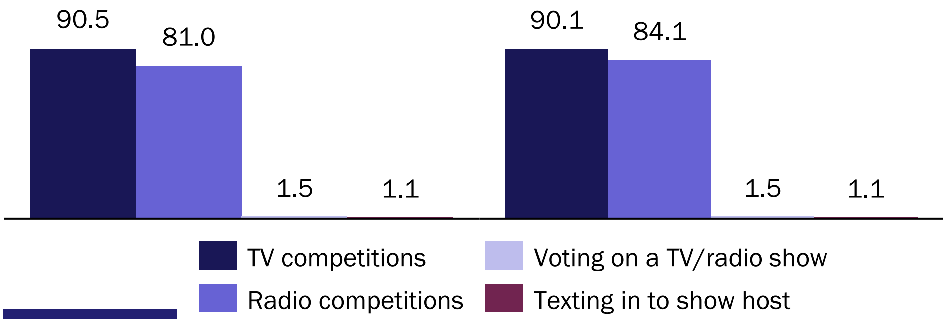
2020-2021

SPEND	USERS	ASPU
£0.4 million	0.3 million	£1.1
25% Users w/problems	16% Users w/trust impacted	- 26 NPS score

TV & RADIO ENGAGEMENT

SERVICE CATEGORY

2020-2021	2021-2022e
SPEND	SPEND
£174.2 million	**£176.8 million**



TV COMPETITIONS

2020-2021

SPEND	USERS	ASPU
£90.5 million	**7.6 million**	**£11.9**
14% Users w/problems	**7%** Users w/trust impacted	**- 47** NPS score

RADIO COMPETITIONS

2020-2021

SPEND	USERS	ASPU
£81.0 million	**5.4 million**	**£15.0**
13% Users w/problems	**7%** Users w/trust impacted	**- 46** NPS score

VOTING ON TV /RADIO SHOW

2020-2021

SPEND	USERS	ASPU
£1.5 million	**1.3 million**	**£1.2**
16% Users w/problems	**8%** Users w/trust impacted	**- 48** NPS score

TEXTING IN TO SHOW HOST

2020-2021

SPEND	USERS	ASPU
£1.1 million	**0.9 million**	**£1.2**
26% Users w/problems	**14%** Users w/trust impacted	**- 32** NPS score

Annex B Market sizing methodology

Our approach to estimating the end-user spend on phone-paid services in 2020–2021 and until 2023–2024 was based on the following four-step process:[30]

- step 1: collection of network returns data
- step 2: online consumer survey
- step 3: in-depth interviews with industry participants
- step 4: market modelling.

B.1 Step 1: collection of network returns data

Network operators report revenue (and outpayments to value chain participants) by spending channel on a quarterly basis to the Phone-paid Services Authority. This data was used to derive the overall end-user spend (excluding VAT) on phone-paid services for 2020–2021, broken down by spending channel. Consumer spending on charity donations does not generate revenue for network operators and is therefore not reported in network returns. However, network operators have reported the total value of the charity donations that have passed through their networks to the Phone-paid Services Authority since 2017–2018.

We took steps 2–4 to further break down the end-user spending by service category (13 categories) and service type (48 types) and forecast the evolution of the market up to 2023–2024.

B.2 Step 2: online consumer survey

We have conducted a survey of consumers to generate quantitative data on the adoption of phone-paid services, reasons for the use/non-use of phone-paid services and the key underlying factors affecting usage and overall satisfaction. Field work was conducted online by Lucid between March and April 2021. The survey included 25 questions overall and took approximately 10 minutes for survey respondents to complete. The survey questionnaire was designed to maintain continuity with previous annual market reviews, although changes have been included to address the continuous evolution of the phone-paid services market.

The total survey sample consisted of 9274 individuals and was broadly representative of the population in the UK aged 16 years and above, by gender and age.[31] Figure B.1 and Figure B.2 provide a comparison of the distribution of the population of the UK and the survey sample by age group and gender, respectively.

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30 Steps are presented sequentially for clarity, but some activities (such as the market modelling exercise) were relevant at all stages of the project.

31 Office of National Statistics (25 June 2021), *Population estimates for the UK, England and Wales, Scotland and Northern Ireland.* Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2020

Figure B.1: Distribution of the population and survey sample, by age group, UK, 2020–2021

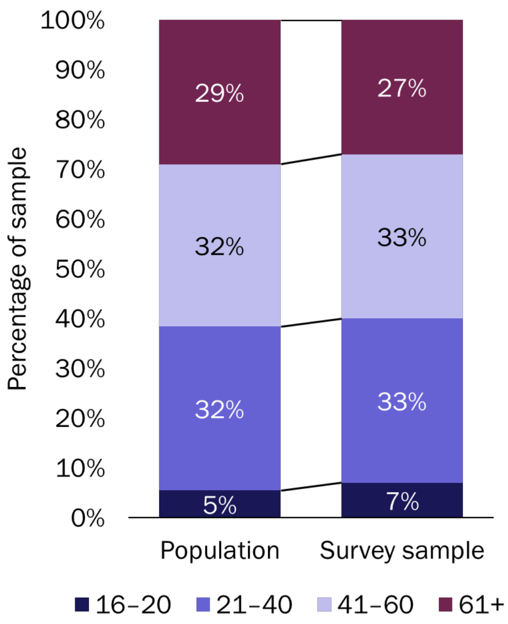
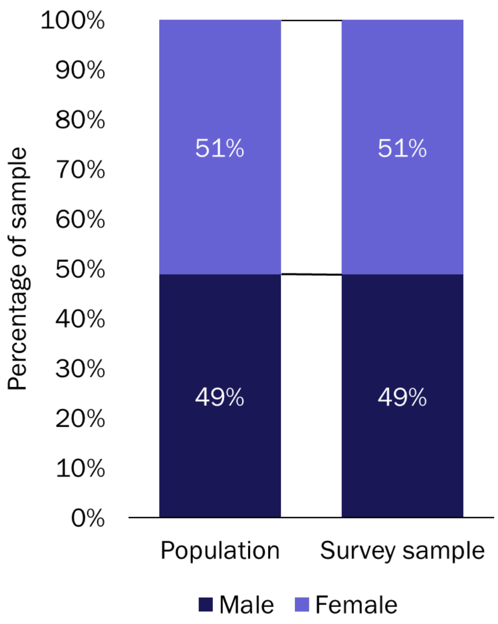


Figure B.2: Distribution of the population and survey sample, by gender, UK, 2020–2021



Source: Analysys Mason and Office for National Statistics, 2021

5014 of the 9274 individuals surveyed used at least one phone-paid service in the past 12 months (equivalent to a 54% incidence rate). Respondents were asked about their usage (including the types of service used, spending channels, frequency of use and spend levels), underlying key drivers (for example, their own preferences, the key difficulties that they have encountered and levels of trust) and overall satisfaction with phone-paid services. Further detail on the demographic segmentation of these respondents is provided in Figure B.3.

Figure B.3: Demographic segmentation of phone-paid services users, UK, 2020–2021

Age group	Gender	Region
16–20: 8%	Female: 51%	England (South): 37%
21–30: 21%	Male: 49%	England (North): 25%
31–40: 20%		England (Midlands): 23%
41–50: 20%		Scotland: 8%
51–60: 14%		Wales: 4%
61+: 18%		Northern Ireland: 3%

Source: Analysys Mason, 2021

B.3 Step 3: in-depth interviews with industry participants

In-depth interviews with executives in senior positions across 17 organisations with activities in the phone-paid services industry, including mobile operators, fixed operators, intermediaries, Level 1 providers, Level 2 providers and trade associations were conducted between February and May 2021. The objectives of these interviews were:

- to collect additional historical revenue data to cross-check the adoption and spend level implied by the consumer survey in step 2 at the service category and service type level

- to develop a broader understanding of the main trends affecting the adoption of phone-paid services, frequency of usage and spend level over the next 12 months and the next 3 years to inform our modelling assumptions and estimates of the size of the market in 2021–2022, 2022–2023 and 2023–2024.

Interviews were conducted as an open-ended discussion, but aimed to cover the following areas: market trends by segment of operation, market outlook, issues affecting consumer confidence and top-line financials. Figure B.4 provides an overview of the interviews completed, by type of industry participant.

Figure B.4: Interviews completed, by type of industry participant, UK, February–May 2021

Type of participant	Number of organisations interviewed
Mobile network operator	3
Fixed network operator	3
Intermediary	1
Level 1 provider	4
Level 2 provider	5
Trade association	1

Source: Analysys Mason, 2021

B.4 Step 4: market modelling

As outlined in step 1, the overall purpose of the market modelling exercise was to further break down the end-user spend by service category and type.

- Firstly, we used the output of the consumer survey (step 2) to generate initial assumptions about key drivers of spending (including service adoption, frequency of usage and spend level) and to estimate a draft distribution of end-user spending by service category and type (referred to as a ‘bottom-up’ approach).

- Secondly, we used additional revenue data provided by Level 1 aggregators, combined with insights obtained during interviews with industry participants (step 3), to segment the total reported end-user spending by service category and type (also referred to as a ‘top-down’ approach).

- Both approaches were then used to derive the final spending figures by channel, service category and service type, using the top-down approach to account for under- or over-reporting from survey respondents, and the bottom-up approach to estimate the market where little data or insights had been provided.

- We then forecast the market size for 2021–2022, 2022–2023 and 2023–2024. This exercise was primarily based on key modelling drivers, on the insights generated from our interviews with industry participants (including their views on the evolution of the market segments that they are operating within) and on additional information collected from desk research on expected upcoming market developments.

The final output of the market modelling exercise is an estimate of end-user spending (excluding VAT) on phone-paid services, split by service category (13 categories), service type (48 types) and spending channel (7 spending channels) for 2020–2021, 2021–2022, 2022–2023 and 2023–2024.