analysys mason

Report for the Phone-paid Services Authority

Annual market review for phone-paid services 2019–2020

August 2020

Contents

1. Executive summary

This report is the Annual Market Review of the phone-paid services market for 2019–2020,[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 2019–2020, a discussion of the key market drivers, as well as an outlook for the market until 2022–2023.[2] The report draws upon a survey of 9601 consumers conducted between March and April 2020, which asked respondents about their usage 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 incorporates the views of many of these key industry interviewees about the likely impact of COVID-19 on their businesses.

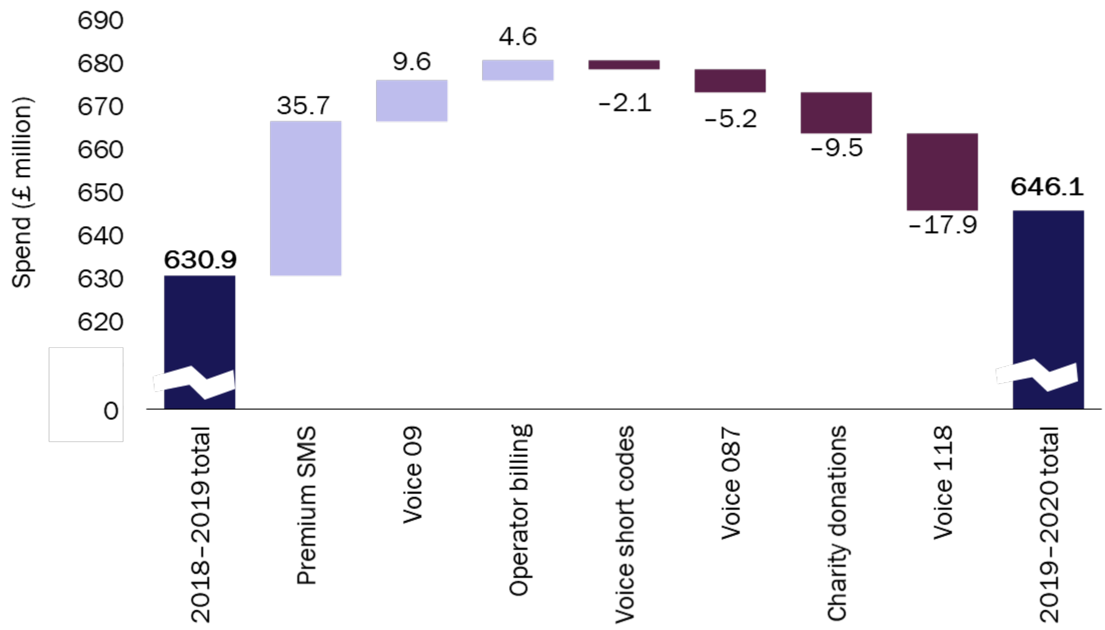
Consumers in the UK spent £646.1 million (excluding VAT) on phone-paid services in 2019–2020, which represents an increase in spending of 2.4% from £630.9 million in 2018–2019.[3] As shown on Figure 1.1, growth was driven primarily by an increase in spending on services using the premium SMS channel and, to a lesser extent, by end-user spend on services that leverage the 09 numbering range (for example, information, connections and/or signposting services), as well as operator billing (including games, entertainment, betting, gambling and lotteries). Charity donations via premium SMS declined (by £9.5 million) during 2019–2020, as did voice-based services delivered via voice short codes, voice 087 and voice 118.

1 The 2019–2020 date range refers to the Phone-paid Services Authority's 2019–2020 fiscal year, running from 01 April 2019 to 31 March 2020 (also referred to as 'the past 12 months' in this report). The 2020–2021 fiscal year should be understood as the period running from 01 April 2020 to 31 March 2021 (also referred to as 'the next 12 months' in the report). The same terminology applies to 2021–2022 and 2022–2023.

2 The Phone-paid Services Authority has asked Analysys Mason to extend its market forecast to 2022–2023 (as opposed to a 1-year forecast included in previous iterations of the Annual Market Review) in light of the move towards Code 15 (the next Code of Practice to be issued Phone-paid Services Authority). This forecast involves a strategic review of all existing regulation, and the longer forecast horizon is intended to help identify areas of interest.

3 *Annual Market Review 2018–2019* (20 August 2019). Available at: https://psauthority.org.uk/research-and-consultations/research/2019/august/amr-201819.

Figure 1.1: Variations in end-user spend (excluding VAT) by spending channel, UK, 2018–2019 to 2019–2020[4]



Note: This chart shows the total spend in 2018–2019 on the left-most bar and total spend in 2019–2020 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel (for example, spend on premium SMS increased by £35.7 million between 2018–2019 and 2019–2020).

Source: Phone-paid Services Authority, 2020

The following trends can be observed during 2019–2020 in the key service categories that make up each spending channel.

- Growth in spending this year on premium SMS was driven once again by the strong performance of TV and radio engagement services[5].
- Operator billing continued to grow organically, but unlike last year, no new agreements were made between mobile network operators and large over-the-top (OTT) players. During this period, no major new services were introduced to the UK market, which is approaching saturation as a result.
- Charity donations declined from the levels reached in 2018–2019, largely due to the biannual nature of this segment. However, charity donations have actually increased compared to 2017–2018 (+£2.6 million) due to the introduction of a higher spend cap per donation in late 2018.
- Unexpected growth in spending on voice-based services that use the 09 numbering range during 2019–2020 was primarily driven by promotional efforts of providers of information, connection and signposting services (ICSS). These developments provided significant regulatory challenge,

4 Please note that numbers in figures are rounded, so totals may not appear to be equal to the sum of market segments.

5 This report considers spend on free-to-enter competitions with an optional donation separately from the spend in the broadcast competitions and TV and radio engagement categories within our market exercise; this spend is considered to be similar to other donations to charities. As such, this spend is included in the charity donations segment.

and in order to further protect consumers, the Phone-paid services Authority announced new regulations about ICSS which came into force in December 2019, and Google implemented an advertising ban of these services on its platform, which came into effect in March 2020.

- Spend on services that use the 087 and 118 numbering ranges and voice short codes has continued to fall as a result of a declining user base (the availability of cheaper alternatives or free channels is a key factor) and lower spend per user, as well as the continuous migration of businesses to cheaper premium rate numbers or online channels.

Figure 1.2: End-user spend (excluding VAT) via premium SMS by service category, [6] *UK, 2018–2019 and 2019–2020*

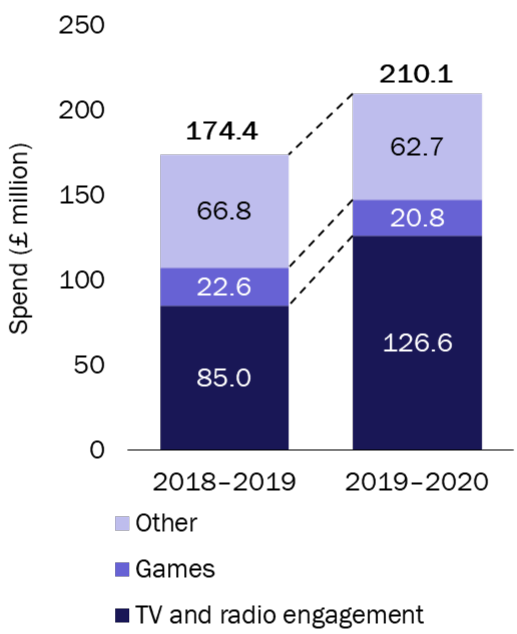
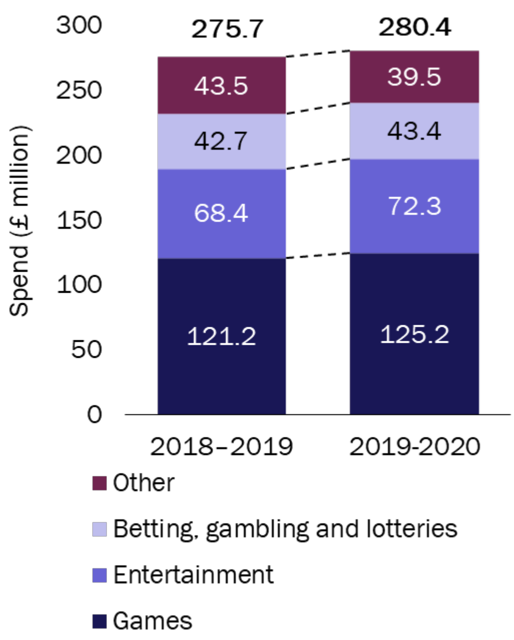


Figure 1.3: End-user spend (excluding VAT) via operator billing by service category, [7] *UK, 2018–2019 and 2019–2020*



Sources: Analysys Mason and Phone-paid Services Authority, 2020

In the interest of transparency, we have compared the forecast that we produced for the 2018–2019 Annual Market Review with the data that we collected this year. Figure 1.4 shows that the most-significant differences in consumer spending occur in the voice 09, premium SMS and operator billing payment channels, while changes in spending for voice 087 and voice 118 were more marginal. Our interviews with industry stakeholders help to explain how our forecasting for 2019–2020 diverges from actual spend for this period (please see below for highlights).

6 In Figure 1.2, 'Other' includes the remaining seven service categories: competitions and quizzes; device personalisation and security; digital payments; information, news and education; personal and relationship services; sexual entertainment; and TV and radio engagement. No single category in 'Other' is estimated to have generated over 10% of revenue for the channel.

7 In Figure 1.3, 'Other' includes the remaining six service categories: device personalisation and security; digital payments; information, news and education; lifestyle; personal and relationship services; and sexual entertainment. No single category in 'Other' is estimated to have generated over 10% of revenue for the channel.

Figure 1.4: Comparison of our forecasted results for consumer spend on phone-paid services in the UK in 2019-2020 to actual spend

Payment channel	Forecasted change in spend	Actual change in spend	Comments
Premium SMS	+£4.4 million (+2.5%)	+£35.7 million (+20.5%)	Results from industry interviews conducted by Analysys Mason in 2019 indicated that it would be difficult to replicate the exceptional growth in spend between 2017–2018 and 2018–2019 on premium SMS (+16.5% year-on-year) in 2019–2020, especially in the TV and radio engagement segment. In addition, we anticipated that the announced migration of some broadcaster competitions from premium SMS to operator billing would have an adverse effect on the premium SMS channel in 2019–2020. However, spend in the TV and radio engagement segment grew substantially once again to completely surpass our forecast, while migration to operator billing is not expected to occur between 12 and 18 months after the end of 2019–2020.
Operator billing	+£25 million (+9.0%)	+£4.7 million (+1.7%)	While we initially expected spend on operator billing to increase more modestly in 2019–2020 than during 2018–2019 (+47% year-on-year) due to the expected absence of new partnerships between mobile network operators and major merchants, we nevertheless expected stronger organic growth to be generated from the games and entertainment segments; we had too limited information last year to be able to determine how much growth was organic or due to new partnerships.
Voice 09	–£10.5 million (-18.8%)	+£9.6 million (+17.2%)	We expected spend on voice 09 to decline in 2019–2020, largely as a continuation of the trend seen in previous years. The unexpected growth of ICSS (which received a massive boost over the first two quarters of 2019–2020 immediately preceding the introduction of new regulation and a future ban on advertising these services via Google) was difficult to foresee.
Charity donations	–£6.6 million (-13.3%)	–£9.5 million (-19.2%)	As expected, the seasonality of the phone-paid charity segment resulted

			in a decline in spend during a 'down' year, though our forecast produced last year slightly overestimated the positive effect of an increased cap in individual donations via premium SMS. Our forecasting was informed by a number of interviewees attributing substantial growth to this change, perhaps without knowledge of exact numbers.
Voice short codes	–£0.5 million (-2.7%)	–£2.1 million (-11.2%)	Conversations with industry stakeholders conducted in 2019 indicated that many services that utilise voice short codes would likely shift to free alternatives such as in-app voting; this has occurred at scale earlier than we expected.
Voice 087	–£4.8 million (-17.5%)	–£5.3 million (-19.5%)	Spend declined roughly as predicted.
Voice 118	–£17.1 million (-58.0%)	–£17.9 million (-60.7%)	As anticipated, the performance of the voice 118 channel was hit hard by price caps imposed by Ofcom, which began in April 2019.

Source: Analysys Mason, 2020

The phone-paid services market is expected to grow slightly in 2020–2021 and generate £657.4 million in consumer spend (representing growth of 1.7% year-on-year).

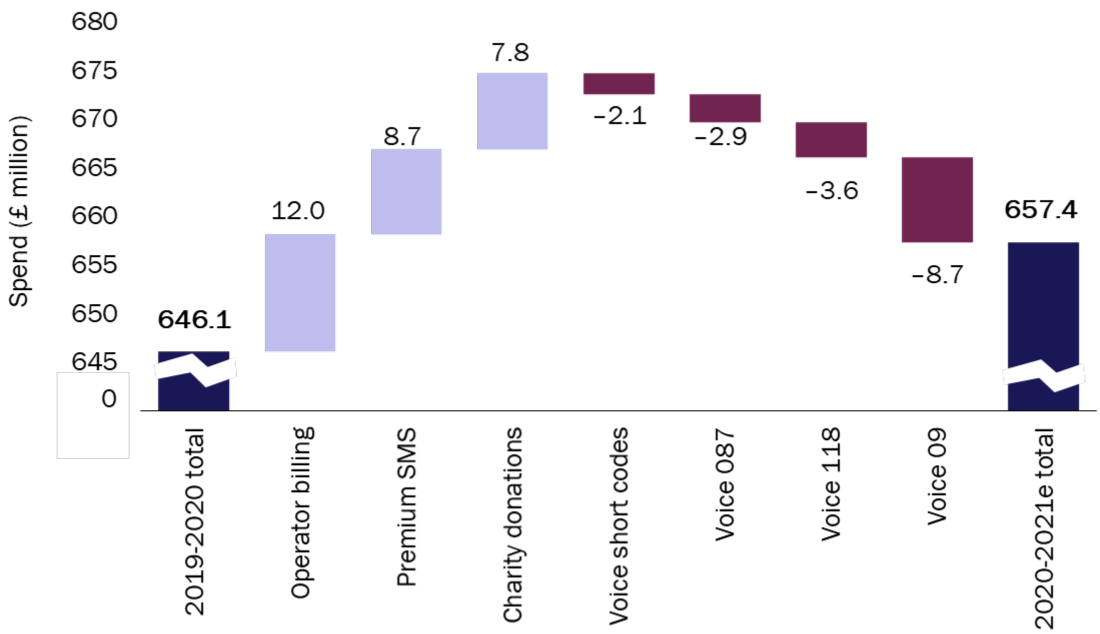
- Spend via the premium SMS channel is projected to slow down because it will become increasingly difficult for TV and radio broadcasters to introduce new competitions and attract more participants from a broadly static overall audience. However, spend on TV competitions may be boosted by individuals spending more time at home as a result of the COVID-19 pandemic.

- Operator billing will continue to grow steadily, driven by the continuously strong performance of games and entertainment services. Music services and games downloaded from app stores are expected to contribute significantly to growth through this channel, as is the popularity of video streaming services. Although consumer propensity to pay for these services via phone bills is likely to remain broadly stable, these services are expected to benefit from higher usage during lockdown and from their inclusion in some mobile plan bundles. Further agreements between select mobile network operators and major OTT providers are expected to be made by the end of 2020, the effects of which will be felt to some extent in 2020–2021.

- Spend on charity donations is expected to be slightly higher in 2020–2021 because of the favourable seasonality of major telethon events. However, a short-term spike in donations in response to COVID-19 in 1Q 2020–2021 may have a displacement effect, and the looming economic crisis in the UK is likely to impact households' incomes towards the end of 2020–2021, which may mean that consumers are less willing and/or able to donate later in the year. This will limit the potential for growth for donations because large telethons are held later in the year.

- End-user spend on voice-based services (including voice 09 and voice 087) will decline, which follows the pattern set in previous years. However, the decline in spend on voice 118 services will slow down in 2020–2021 as the impact of Ofcom's cap will have been normalised by this point of time. Spend on voice short codes will avoid this decline somewhat because the channel continues to be used by a small user base for participating in broadcasting competitions.

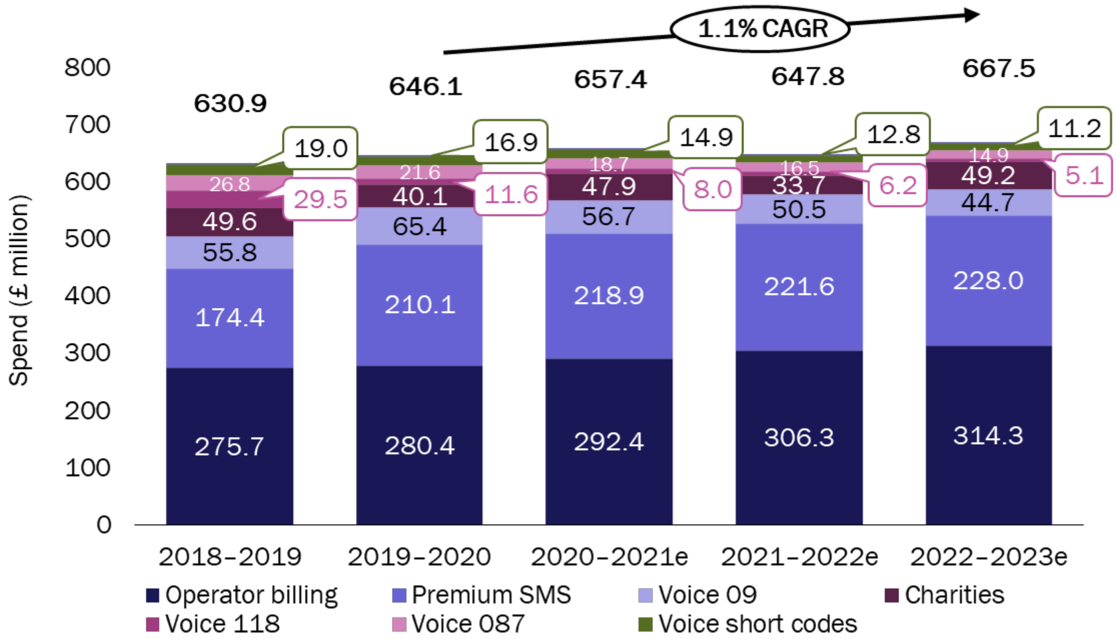
Figure 1.5: Variations in end-user spend (excluding VAT) by spending channel, UK, 2019–2020 to 2020–2021e (estimated)



Sources: Analysys Mason and Phone-paid Services Authority, 2020

As shown in Figure 1.6, we expect the phone-paid services market to decline to £647.8 million in 2021–2022 (down by 1.5% year-on-year), primarily because of challenging macroeconomic conditions following the emergence of COVID-19, before recovering slightly in 2022–2023 to reach £667.5 million (up 3.1% year-on-year, at a 1.1% Compound Annual Growth Rate (CAGR) from 2019-2020). We expect consumer spend on TV and radio engagement, games, entertainment, betting, gambling and lotteries services to continue to increase over the forecast period (although growth for some of these categories will be limited in 2021–2022), while charity donations will continue to reflect the seasonality of telethons, which will be affected by economic contraction. Spend on services with limited marketing and advertising (e.g. competitions and quizzes, personal and relationship services, sexual entertainment) will continue to decline, though the scale of this decline may be reduced because a small core of loyal users continues to use the service.

Figure 1.6: End-user spend (excluding VAT) by spending channel, UK, 2018–2019 to 2022–2023e (estimated)



Sources: Analysys Mason and Phone-paid Services Authority, 2020

We conducted a survey of phone-paid services users (as we did last year) to inform our understanding of the market and to help with our market forecast. Our survey of 9601 consumers suggested that 52% of the UK population aged 16 or above used at least one phone-paid service in 2019–2020. The key drivers of phone-paid service usage were largely unchanged compared with last year: these include convenience, affordability and impulse purchasing. 24% of users reported problems with these services in the last 12 months, including difficulty with using the services, differences between what was advertised and what they received, and price, all of which are consistent with the results that we reported last year. An increase in problems relating to charges and subscriptions without consent is of concern, but the extension of special conditions[8] to all subscription services in November 2019 is expected to produce positive benefits in the medium term. As was the case last year, survey respondents reported the largest number of problems when using sexual entertainment services and personal and relationship services, while survey respondents reported the fewest number of issues with making charity donations. Overall, the Net Promoter Score for the phone-paid services industry (–17) saw a significant improvement compared with last year (–26), and a few select services (such as charity donations and entertainment) performed relatively well (equal to or above NPS = 0).[9]

8 The PSA announced on 6 August 2019 that it would introduce special conditions on subscription services, requiring a two-stage sign-up process, greater clarity in ensuring that customers are aware that they are signing up to a subscription, and issuing of a receipt after every charge. These measures came into force on 1 November 2019.

9 By comparison, entertainment was the only service category to achieve an NPS of ~0 last year, with charity donations second-highest at –9.

2. Introduction

This report is the Annual Market Review of the phone-paid services market for 2019–2020,[10] 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 2019–2020, a discussion of the key market drivers, an outlook for the market in 2020–2021 between 1 April 2020 to 31 March 2021, as well as a forecast of consumer spend up to 2022–2023. 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.

The study 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 individual services, spending channels and price points, and regulatory decisions and key developments that may have impacted the market in 2019–2020.

- We conducted a consumer survey of a nationally representative sample of 9061 individuals.[11] 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 spend levels). The survey also helped to identify the key underlying factors affecting 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 (referred to in this report as 'industry participants') in the phone-paid services industry across the value chain, including mobile operators, fixed line operators, intermediaries, Level 1 providers[12] and Level 2 providers.[13]

- 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 current state and size of the

10 2019–2020 refers to the Phone-paid Services Authority's 2019–2020 fiscal year, running from 01 April 2019 to 31 March 2020 (also referred to as 'the past 12 months' in the text). The 2020–2021 fiscal year should be understood as the period running from 01 April 2020 to 31 March 2021 (also referred to as 'the next 12 months' in the text). The same terminology applies for 2021–2022 and 2022–2023.

11 Field work for the consumer survey was conducted by market research company Luc.id between March and June 2020.

12 A Level 1 provider is an organisation that provides a platform that – through arrangements made 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.

13 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.

market in 2019–2020 and its outlook up to 2022–2023. We have also critically assessed our own market review from last year: we have determined the reasons for inaccuracies in our previous market modelling, as well as identified the most useful elements of our survey. This year's report builds on this cumulative knowledge and, as a result, we expect the information presented here to be more accurate[14]. 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 2019–2020, 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 2020–2021.
- Section 6 comments on our expectations regarding the evolution of the market up to 2022–2023.
- Section 7 examines the typical profile of users of phone-paid services in more detail and highlights the key issues affecting their service usage.
- Section 8 summarises the key conclusions from this study.

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.

14 The consequences of the COVID-19 pandemic on the broader consumer spend remain unpredictable at the time of writing. While developed on the basis of assumptions that we believe to be reasonable and supported by evidence from interviews with the phone-paid services industry, our forecast of spend on phone-paid services up to 2022–2023 carries a greater degree of uncertainty than in normal circumstances as a result.

3. Size of the phone-paid services market in 2019–2020

Consumers in the UK spent £646.1 million (excluding VAT) on phone-paid services in 2019–2020, which represents an increase in spending of 2.4% from £630.9 million in 2018–2019.[15] Growth was driven primarily by an increase in spending on services using the premium SMS channel and, to a lesser extent, by end-user spend on services that leverage the 09 numbering range (for example, information, connections and/or signposting services), as well as operator billing (including games, entertainment, betting, gambling and lotteries). Charity donations via premium SMS declined (by £9.5 million) during 2019–2020, as did voice-based services delivered via voice short codes, voice 087 and voice 118.

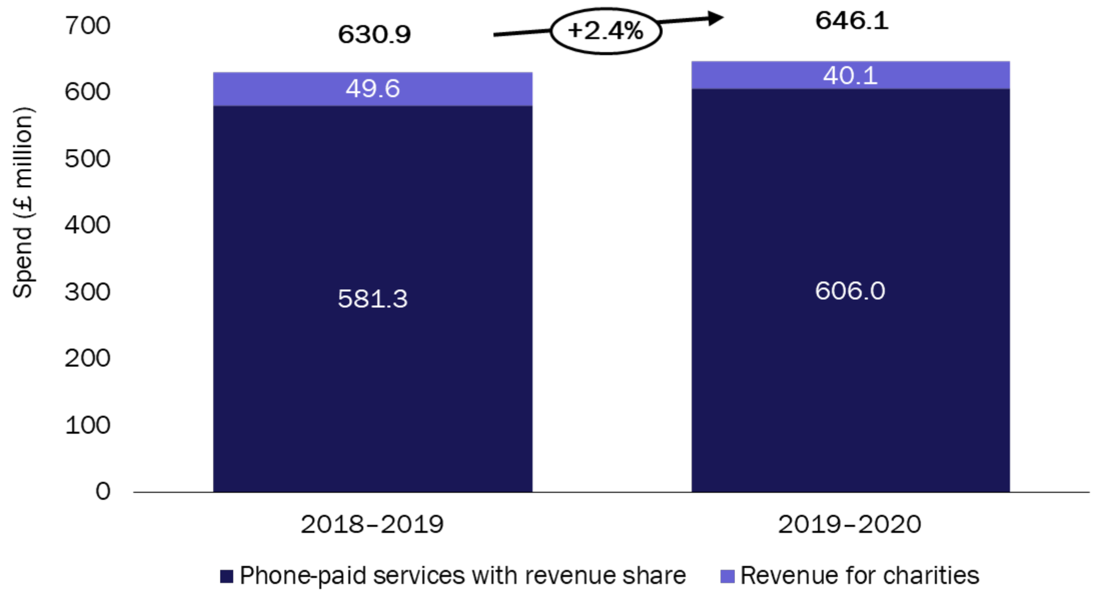
3.1 Overall market size

Consumers spent £646.1 million on phone-paid services in 2019–2020 in the UK (+2.4% year-on-year). As shown in Figure 3.1, £606.0 million of this was revenue captured by the phone-paid services industry itself (+4.2% year-on-year), while £40.1 million was raised by charities (–19.2% year-on-year) via premium SMS. The growth rate of industry revenue was more modest than for 2018–2019 (+15.6% year-on-year), but still reached its highest point since 2012–2013 (£710.3 million).

An analysis of the evolution of end-user spend by key spending 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 across each spending channel.

15 *Annual Market Review 2018–2019* (20 August 2019). Available at: https://psauthority.org.uk/research-and-consultations/research/2019/august/amr-201819.

Figure 3.1: End-user spend (excluding VAT) on phone-paid services, UK, 2018–2019 and 2019–2020

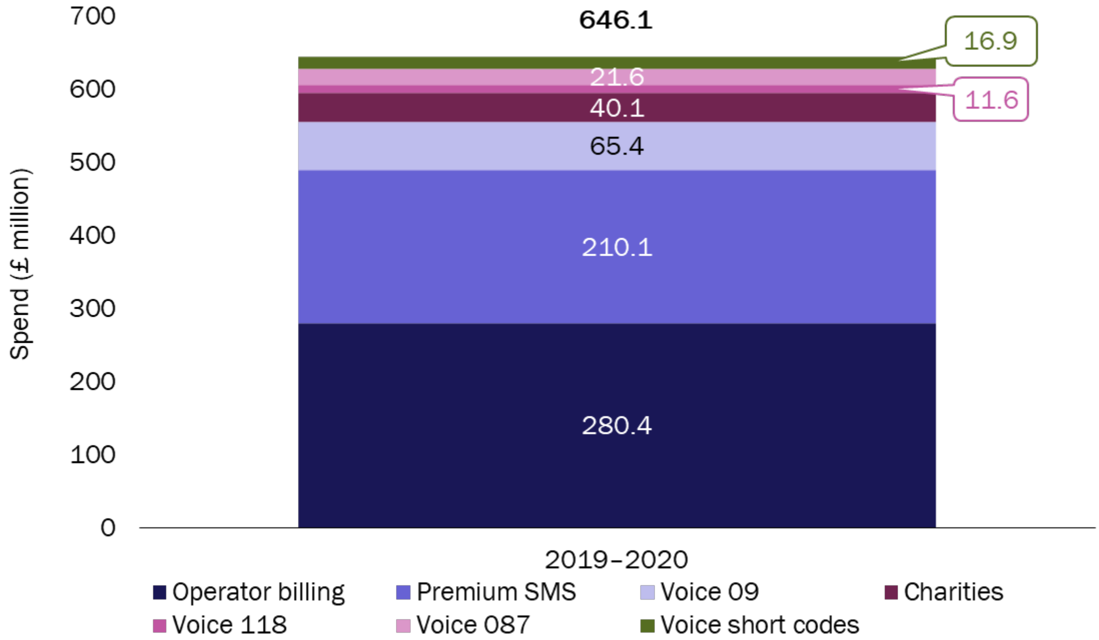


Source: Phone-paid Services Authority, 2020

3.2 Spend by channel

Operator billing captured £280.4 million in consumer spend in 2019–2020 and was the largest spending channel (accounting for 43% of the total consumer spend), followed by premium SMS (33% of consumer spend, excluding charity donations made through premium SMS). Figure 3.2 below provides a breakdown of consumer spend by spending channel for 2019–2020.

Figure 3.2: End-user spend (excluding VAT), by spending channel, UK, 2019–2020



Source: Phone-paid Services Authority, 2020

The absolute net growth of consumer spend on phone-paid services between 2018–2019 and 2019–2020 (+£15.2 million) was primarily driven by:

- the premium SMS channel, which generated an additional £35.7 million in consumer spend in 2019–2020. This was primarily driven by the strong performance of TV and radio engagement services, with the introduction of higher price points for participation by certain radio broadcasters and some smaller radio stations embracing premium rate services contributing to this growth. TV and radio engagement services captured 60% of revenue accrued through spend using premium SMS, up from 49% in 2018–2019. Further details can be seen in subsection 4.1.

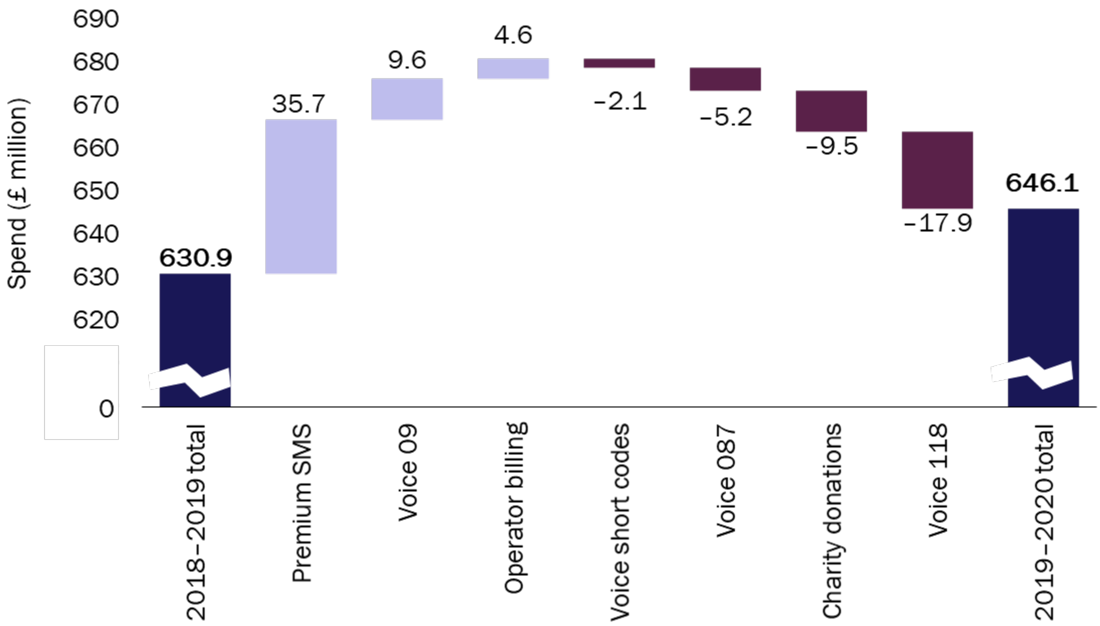
- the operator billing channel, which generated an additional £4.6 million in 2019–2020. Growth was significantly lower than in 2018–2019 (+£87.7 million) as a result of the absence of new agreements between mobile network operators and major OTT players[16] and increasing saturation of the market, driven by a lack of major new services being introduced and a general limited consumer awareness of operator billing. See more detail in subsection 4.2.

- services delivered through the 09 numbering range. Spend on these services grew by £9.6 million due to an increase in ICSS promotions and usage prior to the impending introduction of new regulations and bans on advertising through Google. See more detail in subsection 4.3.

16 The agreements between Apple and EE (announced in March 2018) and between Apple and O2 (announced in May 2018) had a positive impact on the size of this segment in 2018–2019 by mechanically increasing the size of the overall pool of potential operator billing users.

Charity donations were negatively impacted by the relatively unfavourable seasonality for the largest biannual telethon events (such as Red Nose Day), declining by £9.5 million (see more detail in subsection 4.4). End-user spend on voice-based services that use the 087 and 118 numbering ranges and voice short codes largely followed the same pattern observed during the past few years: a declining user base, driven by the availability of cheaper or free alternatives, combined with the continuous migration of businesses to cheaper premium rate numbers (such as 084) or online channels, which together continued to negatively impact the revenue generated by the industry through 087 and voice short codes. Ofcom's price cap on directory enquiry services contributed to a strong decline in spend on voice 118 services. More detail is available in subsections 4.5 to 4.7.

Figure 3.3: Variation in end-user spend (excluding VAT) by spending channel, UK, 2018–2019 to 2019–2020[17]



Note: This chart shows the total spend in 2018–2019 on the left-most bar and total spend in 2019–2020 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel (for example, spend on operator billing increased by £4.6 million between 2018–2019 and 2019–2020).

Source: Phone-paid Services Authority, 2020

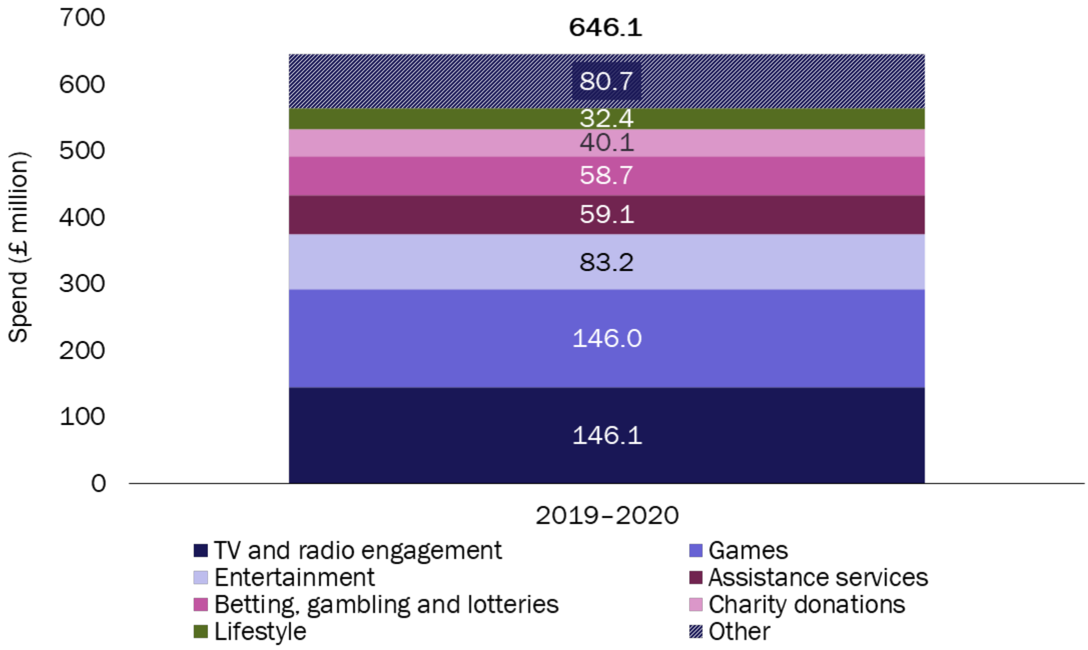
3.3 Spend by service category

In 2019–2020, consumers spent an estimated £146.1 million on TV and radio engagement (for example, broadcaster competitions), which is the largest service category. Phone-paid games and entertainment services (such as music services) were the second- and third-largest service categories, generating £146.0 million and £83.2 million in spend, respectively. These three service categories, which contain services offered by well known consumer brands such as Spotify, Apple App Store and Google Play, together accounted for an estimated 58% of total spend on phone-paid services, up from

17 Please note that numbers in figures are rounded, so totals may not appear to be equal to the sum of market segments.

52% in 2018–2019. Figure 3.4 below provides an estimated breakdown of spend by service category.[18]

Figure 3.4: End-user spend (excluding VAT), by service category,[19] UK, 2019–2020[20]



Sources: Analysys Mason and Phone-paid Services Authority, 2020

As shown in Figure 3.5 below, the absolute incremental spend in 2019–2020 (+£15.2 million) was mainly driven by the following factors.

- Spend on TV and radio engagement services (+£42.8 million) was positively impacted by the introduction of higher price points for participation by certain radio broadcasters and some smaller radio stations embracing premium rate services (see subsection 4.1). Spend on TV and radio engagement continued to grow, with viewership and rates of entry for premium competitions remaining high despite concerns within the industry that the segment had reached saturation.

- The inclusion of popular streaming services (for example, Spotify) in mobile subscriptions by selected operators has positively impacted the entertainment segment, which generated an addition £3.1 million in spend in entertainment services.

18 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 spend by service category and individual service type.

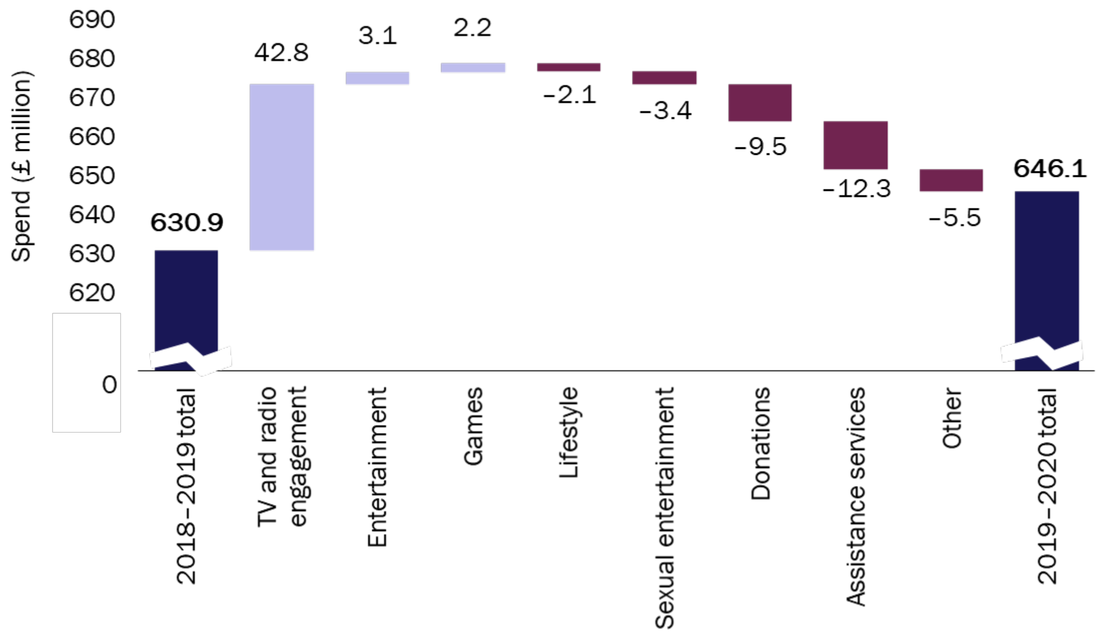
19 'Other' includes service categories that are estimated to have generated £20 million or less, including sexual entertainment, personal and relationship services; competitions and quizzes; digital payments; information, news and education; and device personalisation and security.

20 Please note that all numbers within figures are rounded, so totals may not appear to be equal to the sum of market segments.

- The games segment generated an additional £2.2 million in spend, driven by the popularity of large app stores (including apps sold by Apple, Google and Microsoft). The growth in spending in this category was far more modest than in 2018–2019 (+£50.3 million) because no new agreements were made between mobile network operators and major OTT players.

The service categories that experienced the greatest decline in spend over the past 12 months include sexual entertainment, lifestyle, charity donations and assistance services. The overall net contribution of the remaining other service categories to the growth of the phone-paid market between 2018–2019 and 2019–2020 was negligible.

Figure 3.5: Variation in end-user spend variation (excluding VAT), by service category,[21] UK, 2018–2019 to 2019–2020



This chart shows the total spend in 2018–2019 on the left-most bar and total spend in 2019–2020 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by service category (for example, spend on entertainment increased by £3.1 million between 2018–2019 and 2019–2020).

Sources: Analysys Mason and Phone-paid Services Authority, 2020

21 'Other' includes service categories estimated to have grown or declined by £2 million or less, including entertainment; betting, gambling and lotteries; competitions and quizzes, device personalisation and security; digital payments; games, information, news and education; and personal and relationship services entertainment.

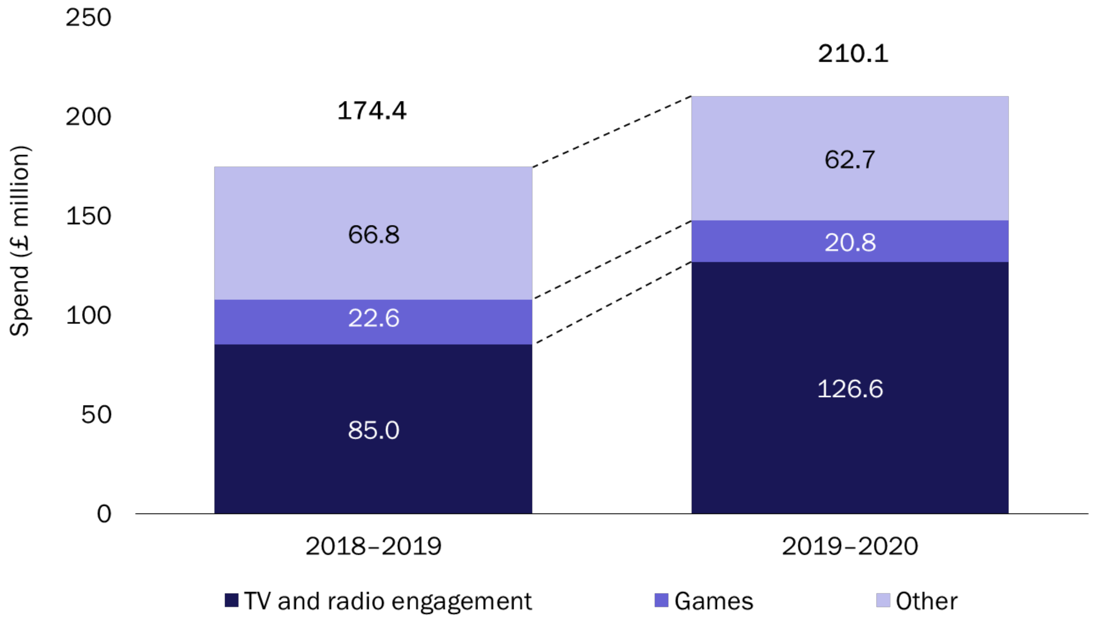
4. Analysis of key market drivers

Premium SMS was the fastest-growing spending channel in 2019–2020, primarily due to the strong performance of TV and radio engagement services. Operator billing continued to grow organically, but unlike last year, no new agreements were made between mobile network operators and large OTT players. Charity donations declined from the levels reached in 2018–2019, largely due to the biannual nature of this segment. However, charity donations have actually increased compared to 2017–2018 (+£2.6 million) due to the introduction of a higher spend cap per donation in late 2018. Unexpected growth in spending on voice-based services that use the 09 numbering range during 2019–2020 was primarily driven by promotional efforts of providers of information, connection and signposting services (ICSS), though other services within this payment channel continued to perform relatively well due to a loyal customer base. Spend on voice-based services that use the 087 and 118 numbering ranges and voice short codes has continued to fall as a result of a declining user base (the availability of cheaper alternatives or free channels is a key factor) and lower spend per user, as well as the continuous migration of businesses to cheaper premium rate numbers or online channels.

4.1 Premium SMS

Premium SMS was the fastest-growing spending channel for phone-paid services in 2019–2020 and the second-largest overall, representing 33% of the total phone-paid services market (£210.1 million in spend). As shown in Figure 4.1 below, TV and radio engagement services accounted (for the first time) for over half of spend on premium SMS. Although games services were the second-largest service category, spend in this category continued to decline. The information, news and education category saw a marginal increase in spend but spend in all other service categories has declined.

Figure 4.1: End-user spend (excluding VAT) via premium SMS by service category,[22] UK, 2018–2019 and 2019–2020



Sources: Analysys Mason and Phone-paid Services Authority, 2020

The following subsections provide a discussion of the key factors that have impacted the evolution of end-user spend via premium SMS across those service categories.

TV and radio engagement services

Consumers spent an estimated £126.6 million on TV and radio engagement services in 2019–2020, primarily on participation in competitions run by TV and radio broadcasters. Spend on other engagement methods (voting or texting a show host) has continued to decline because these services are increasingly being offered for free.

- Some large broadcasters have introduced competitions with higher entry tariffs this year (entry fees for some competitions are now £1.50 compared to the near-universal tariff of £1 in previous years). Despite this increase in the average price of entry, the number of overall entries has not decreased, which has resulted in higher spend in this category. However, the segment is slowly approaching saturation due to a relatively static audience,[23] combined with the difficulties reported by the industry of replicating the success of past competitions while also ensuring a certain degree of rotation (to avoid consumer boredom and to keep audience engagement high). Some smaller radio groups reported that they are considering phone-paid services as a

22 ‘Other’ includes service categories estimated to have grown or declined by £20 million or less, including: entertainment; charity donations; lifestyle; information, news and education; device personalisation and security; digital payments; and sexual entertainment.

23 Ofcom’s ‘Media Nations’ report for 2019 explained that the weekly reach of live radio was 90.2% of households in 2018, compared to 90.3% in 2013. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0019/160714/media-nations-2019-uk-report.pdf.

supplementary source of revenue to advertising. This has been a contributor to revenue growth as well.

- By comparison, the number of consumers entering premium rate TV competitions has continued to grow, despite concerns over a potential decline in live TV viewing figures[24] or fatigue with certain competition formats. Some broadcasters have introduced a larger number of free competitions to keep audiences engaged, and have added online, off-air competitions to further monetise audiences.

Games

Games paid for via premium SMS are typically part of a subscription service that is billed on a weekly or monthly basis in exchange for (limited or unlimited) game downloads from a variety of online games portals.

This segment generated £20.8 million in consumer spend in 2019–2020, which represents a decline of 8.0% compared to 2018–2019 (£22.6 million total spend). This is mainly due to the continued migration of users to more engaging games delivery platforms (such as those available in large app stores), typically billed through operator billing or via credit card. The extension of special conditions[25] by the Phone-paid Services Authority to all subscription services from 1 November 2019 onwards has been negatively received by some industry participants, who report that these measures are impacting the business models of smaller subscription-based games services that exist outside of large app stores.

Other services

The remaining nine service categories include a range of phone-paid services which rely on limited advertising and marketing; this includes competitions and quizzes, device personalisation and security, sexual entertainment, and personal and relationship services. Consumer spend across most of these services has declined in 2019–2020 because existing users have continued to shift to services alternatives offering a more-engaging experience at a lower cost or for free. Many of these services are provided on a subscription basis (such as subscriptions to dating services or fitness advice services) and were therefore likely to be impacted by the expanded special conditions introduced in 4Q 2019–2020.

According to many in the phone-paid services industry, Rich Communication Services (RCS) have the potential to replace plain SMS and provide a boost to the phone-paid services market. RCS could provide merchants with an opportunity to engage directly with consumers who can purchase services using a variety of payment methods. RCS is currently supported by three out of four MNOs in the UK (EE, Three and Vodafone), but the technical challenges associated with MNOs ensuring compatibility of RCS with different handset models and firmware versions – and the significant popularity of

24 Ofcom's 'Media Nations' report for 2019 highlights a steady decline in linear TV viewing numbers, from 242 minutes per day in 2010 to 192 minutes per day in in 2018 (a CAGR of –3%).

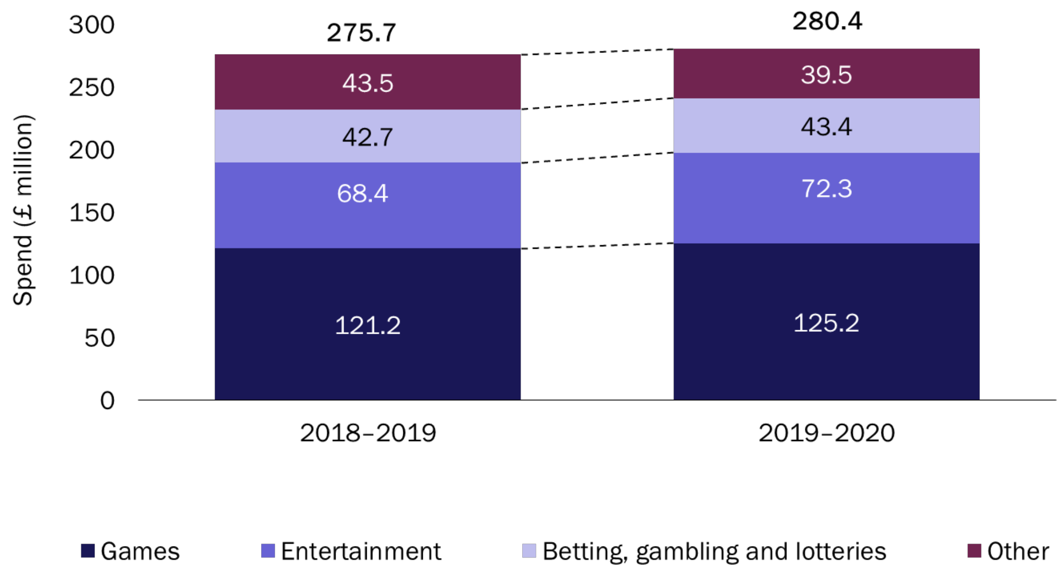
25 The PSA announced on 6 August 2019 that it would introduce special conditions on subscription services, requiring a two-stage sign-up process, greater clarity in ensuring that customers are aware that they are signing up to a subscription, and issuing of a receipt after every charge. These measures came into force on 1 November 2019.

existing feature-rich OTT applications such as Facebook Messenger or WhatsApp – have limited the incentives for consumers to use RCS to date.

4.2 Operator billing

Operator billing was the largest payment channel in 2019–2020, generating £280.4 million in end-user spend. The much reduced year-on-year growth in comparison with 2018–2019 (+3.1% compared with +35%) reflects the increasing saturation of this segment combined with the absence of new operator billing agreements between mobile network operators and large OTT providers, as well as a lack of new services with significant consumer demand. Figure 4.2 shows that games; entertainment and betting, gambling and lotteries remain the three largest service categories using operator billing as a spending channel in 2019–2020.

Figure 4.2: End-user spend (excluding VAT) via operator billing, by service category,[26] *UK, 2018–2019 and 2019–2020*



Sources: Analysys Mason and Phone-paid services Authority, 2020

Below we discuss the key factors that have impacted the evolution of end-user spend via operator billing across these service categories.

Games and entertainment

Consumers spent an estimated £125.2 million on games-related purchases via operator billing in 2019–2020, primarily accrued through downloads of paid-for games from large app stores (for example, Apple App Store and Google Play), games aggregators (including Microsoft Xbox and Sony

26 ‘Other’ includes the seven remaining service categories,: competitions and quizzes; device personalisation and security; digital payments; information, news and education; personal and relationship services; sexual entertainment; and TV and radio engagement. No single category in ‘Other’ is estimated to have generated over 3% of revenue for the channel.

PlayStation Store) and games publishers (such as Blizzard and Riot Games), as well as in-game purchases of items or rewards (including currency, lives or customisable content). Entertainment services generated £72.3 million revenue via operator billing, driven by the popularity of music and video streaming services.

The strong reputation for quality and customer experience offered by large OTT providers, and the wide (and still growing) catalogue of new games and entertainment services available on these platforms, have been key reasons for the strong revenue performance of this segment. In addition, the increasing popularity of mobile plans that offer bundled access to a popular entertainment service[27] has had a positive impact on the operator billing segment.

Betting, gambling and lotteries services

Consumers spent an estimated £43.4 million on betting, gambling and lotteries services in 2019–2020. Most revenue was generated from online gambling services (including mobile casinos applications and websites), followed by sports betting services (18%) and lotteries (4%).

Growth in spend for betting and gambling services has slowed down significantly (+2% compared to +20% in 2018–2019) – our interviews with the industry suggest that a key driver has been the increasing implementation of stricter controls by existing service providers to prevent players from using their mobile bill as a last line of credit. However, there may be scope for spending growth in the coming years because the ban on using credit cards (imposed by the Gambling Commission for online betting and gambling, which came into force in April 2020) may incentivise some users to use operator billing as an alternative payment method (or persuade customers to remain on operator billing, as merchants currently seek to move regular customers to credit cards). Our discussions with industry participants indicate that they consider operator billing to not be captured within the scope of this ban. Society lotteries have not yet had a significant impact on overall spend in this category because of the difficulties in attracting partners, as well as protracted discussions during onboarding processes. These may both relate to requirement for compliance with several layers of regulation, with society lotteries potentially falling under Gambling Commission and Charity Commission rules on top of the requirements set by the Phone-Paid Services Authority. However, industry participants remain hopeful that spend on society lotteries will grow significantly in the next few years as an alternative to traditional charity donations, and have been working with the PSA to ensure they can do so compliantly.

Other services

Spend in all the remaining service categories (including lifestyle; competitions and quizzes; device personalisation and security; digital payments; information, news and education; personal and relationship services; and sexual entertainment) has declined in 2019–2020. Some industry participants have suggested that measures to improve consumer confidence (such as the extension of special conditions to all subscription services in November 2019) have been a key contributing factor

27 O2, for example, has a partnership with Netflix whereby Netflix is offered for free during the first 6 to 12 months with select mobile plans. At the end of the offer period, mobile subscribers are automatically signed up to pay for the Netflix subscription via operator billing (O2's 'Charge 2 Mobile').

to this. While stakeholders believe that these measures have had a positive impact on confidence, the measures are also likely to have had an impact on spending, especially for smaller services.

Little progress has been made with regards to the introduction of new services: while the industry believes that new services will emerge over the next few years in areas such as newspaper and journal access, mobile ticketing and parking or other transport-related services, it has proven difficult, so far, to attract new merchants to launch services with operator billing, primarily due to the perceived complex technical requirements for on-boarding and the typically higher transaction costs in comparison with credit or debit card payments.

4.3 Voice 09

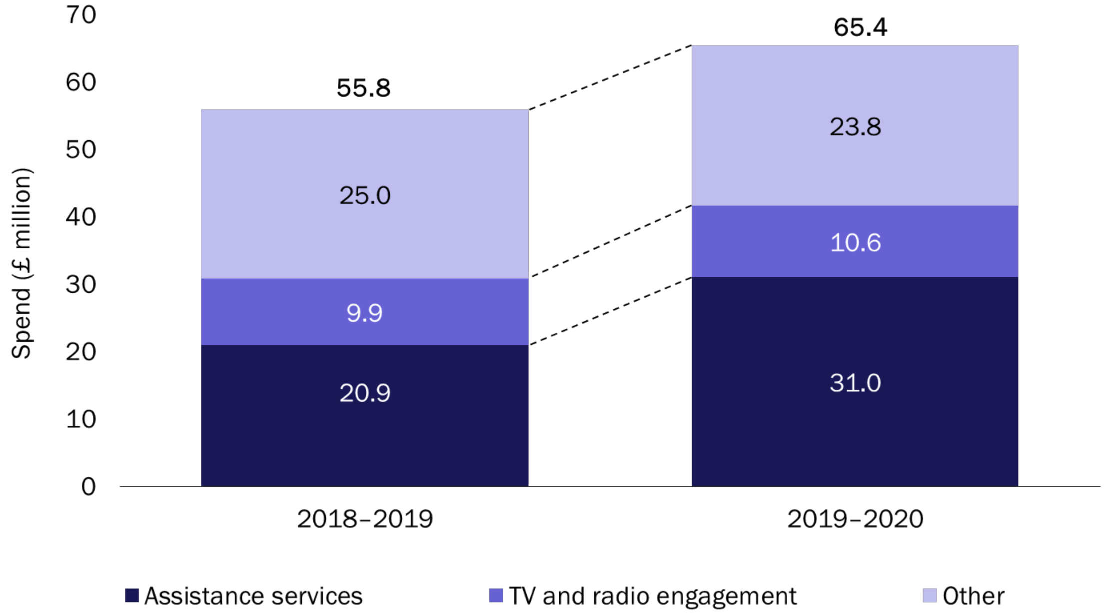
Services accessed and paid for via premium rate 09 number ranges (such as ICSS, customer services and chat services) generated a combined £65.4 million in 2019–2020. This represents a significant year-on-year increase in spend of £9.6 million (or +17%) following a period of relative stagnation in 2018–2019 (+£0.9 million).

Our interviews with industry participants suggest this increase has been driven by a significant marketing push from ICSS service providers between 4Q 2018–2019 and 3Q 2019–2020. The timing of this increase may have been influenced by the announcement made by the Phone-paid Services Authority in April 2019 relating its consultation on the future of ICSS;[28] this news led existing players to actively mitigate the impact of future regulations, which came into force on 20 December 2019. This consultation was opened after the PSA received a number of complaints about ICSS, especially regarding lack of transparency. In addition, in September 2019, Google announced a ban on advertising of ICSS through its platform (which came into force in March 2020). With the ban and regulation now in place, this unexpected increase is expected to remain a one-off, and consumer spending was in fact back to more normal levels by 4Q 2019-2020.

Other services within Voice 09, including broadcaster competitions, adult talk services and astrology services, have held up relatively well compared to the decline of voice-based services through other payment channels.

28 Consultation on changes to the regulatory framework for ICSS officially began on 29 April 2019, with results announced in October 2019. The aim of these regulations is to strengthen existing conditions regarding accurate advertising of services, and to consider all ICSS under special conditions, regardless of number range. Further consultation led to an announcement in March 2020 that ICSS providers must inform customers of costs per minute, as well as inform them that they would subject to their network’s access charge.

Figure 4.3: End-user spend (excluding VAT) via voice 09, by service category,[29] UK, 2018–2019 and 2019–2020



Sources: Analysys Mason and Phone-paid Services Authority, 2020

4.4 Charity donations

Spend on charity donations made through premium SMS fell to £40.1 million in 2019–2020, down from £49.6 million in 2018–2019 (–19% year-on-year). However, the amount raised through charity donations is significantly influenced by the cyclical nature of major telethon events (for example, Red Nose Day only runs every 2 years). Spend on charity donations in 2019–2020 was 7% higher when compared to donations raised in 2017–2018 (£37.5 million). A key factor to influence this growth was the increase in the maximum donation per transaction via premium SMS, which mobile operators lifted from £20 to £30 in late 2018. This higher donation cap addressed the risk for telethon organisers that an individual would be constrained to make a smaller donation via premium SMS than with a credit card. This incentivised telethon organisers to promote both payment methods equally, which contributed to an increase in the number of donations through this channel.

The more-active promotion of premium SMS as a donation channel during telethon events has also raised consumer awareness of the use of premium SMS as a payment mechanism for making donations outside of telethons, which, according to some industry participants, has been driving up the number of recurring donations. Our research also indicates that charities may want to more-actively increase recurring donations outside of telethon events as a result of decreased live TV viewership. Furthermore, some radio broadcasters mentioned during interviews that they successfully raised

29 'Other' includes the five remaining service categories, including 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 the channel.

donations through free-to-enter competitions with an opt-out donation, as well as through exclusive content locked behind donation requirements.[30]

4.5 Voice short codes

Individuals use voice short codes as an alternative way to make calls from a mobile phone to other premium rate numbers (such as 09 or 087) or to similar types of services (for example, broadcaster competitions, customer services and talk services).

Services that use voice short codes captured £16.9 million in consumer spend in 2019–2020 in (or 2.6% of end-user spend on phone-paid services), which is a significant (11%) decrease in spend from £19.0 million in 2018–2019. Most service categories within this payment channel face declining user bases, with the exception of TV and radio engagement. Our interviews with industry participants suggest that voice short codes are typically used for voting or other simple services that have been increasingly replaced by free offerings within apps.

4.6 Voice 087

The 087 number range has historically been used for pre-sales functions by businesses and other organisations.

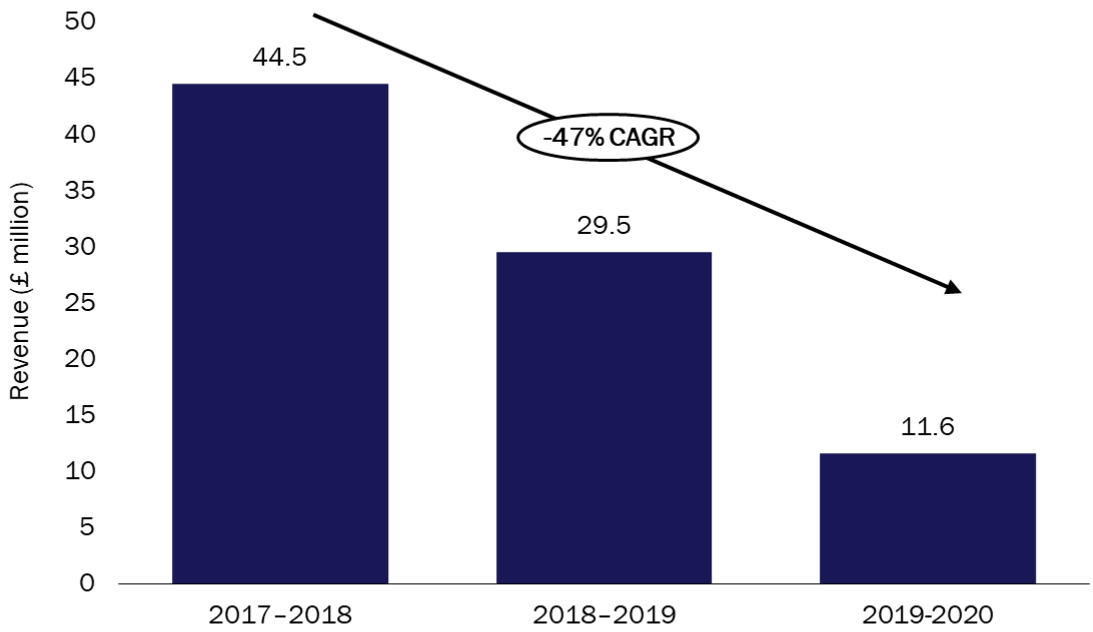
Industry revenue from this service declined to £21.6 million in 2019–2020, which is a continuation of the sharp fall in 2018–2019 (from £45.4 million in 2017–2018 to £26.9 million). Organisations have largely moved their post-sales calls functions to cheaper or free alternatives following the introduction of an EU directive in 2014, which states that 01, 02 or 03 alternatives must exist for customer contact. Ofcom launched a formal consultation in June 2019 to review the future of 087 numbers and it is the view of some industry stakeholders that 087 and 084 will be phased out in the medium term.

4.7 Voice 118

Following the trend of previous years, end user spend significantly declined during 2019–2020, down 61% year-on-year to £11.6 million. This represents the largest annual decline (in percentage terms) recorded for directory enquiry services, which leaves the segment some way away from a peak of £203.7 million in 2010–2011.

30 Such competitions and chargeable content are considered separately to broadcast competitions and TV & radio engagement within our market exercise, due to the donation of all revenues to charity. As such, these are included in the charity donations segment of our market sizing exercise.

Figure 4.4: Revenue from directory enquiries (excluding VAT), UK, 2017–2018 to 2019–2020



Source: Phone-paid Services Authority, 2020

The factors behind this decline remain broadly similar to last year: the increasing availability of information online means that directory enquiry services are becoming obsolete for a majority of individuals, leaving only a small number of long-term users. Furthermore, the average revenue per minute for these services has dropped dramatically following Ofcom's decision in November 2018 to introduce a price cap of £3.65 per 90-second calls to the 118-number range. While BT (118 500) pre-emptively cut prices in June 2018, the regulation became applicable to all providers (including 118 118, the largest service provider in terms of share of call volumes) in April 2019 (that is, at the beginning of 2019–2020). This measure has significantly reduced the average revenue per call to directory enquiry services (see Figure 4.5 below). In addition, Ofcom has recently implemented fines for operators that have failed to meet these price caps[31].

Figure 4.5: Price per 90-second call by 118 service provider, UK

Service provider	Share of call volume (Nov. 2018)	Price per 90 seconds (20 November 2018)	Price per 90 seconds (since April 2019)	Delta
118 118	40%	£11.23	£3.65	–67.0%
118 500	20–30%	£3.10	£3.10	0.0%
118 180	20–30%	£2.25	£2.25	0.0%
118 402		£1.13	£1.13	0.0%
118 247		£6.88	£3.65	–46.9%
118 212		£11.23	£3.65	–67.5%

Sources: Analysys Mason, Ofcom and service providers, 2020

31 See Ofcom's notice at: https://www.ofcom.org.uk/about-ofcom/latest/bulletins/competition-bulletins/all-closed-cases/cw_01242

5. Market outlook in 2020–2021

The phone-paid services market is expected to grow slightly in 2020–2021 and generate £657.4 million in consumer spend (+1.7% year-on-year). Growth of the premium SMS channel is projected to slow down as it will become increasingly difficult for TV and radio broadcasters to introduce new competitions and attract more participants from an overall static audience. However, spend in the TV competitions segment may be boosted by individuals spending more time at home as a result of the COVID-19 pandemic. Operator billing will continue to grow steadily, driven by the popularity and usage of games and entertainment services, particularly during lockdown. Further agreements between select mobile network operators and major OTT providers are expected to be made by the end of 2020, the effects of which will be felt to some extent in 2020–2021. Spend on charity donations is expected to be slightly higher in 2020–2021 because of the favourable seasonality of major telethon events. However, a short-term spike in donations in response to COVID-19 in 1Q 2020–2021 may have a displacement effect, and the looming economic crisis in the UK is likely to impact households' incomes towards the end of 2020–2021. End-user spend on voice-based services will decline (following the pattern set in previous years) largely independently from the COVID-19 crisis.

5.1 Context

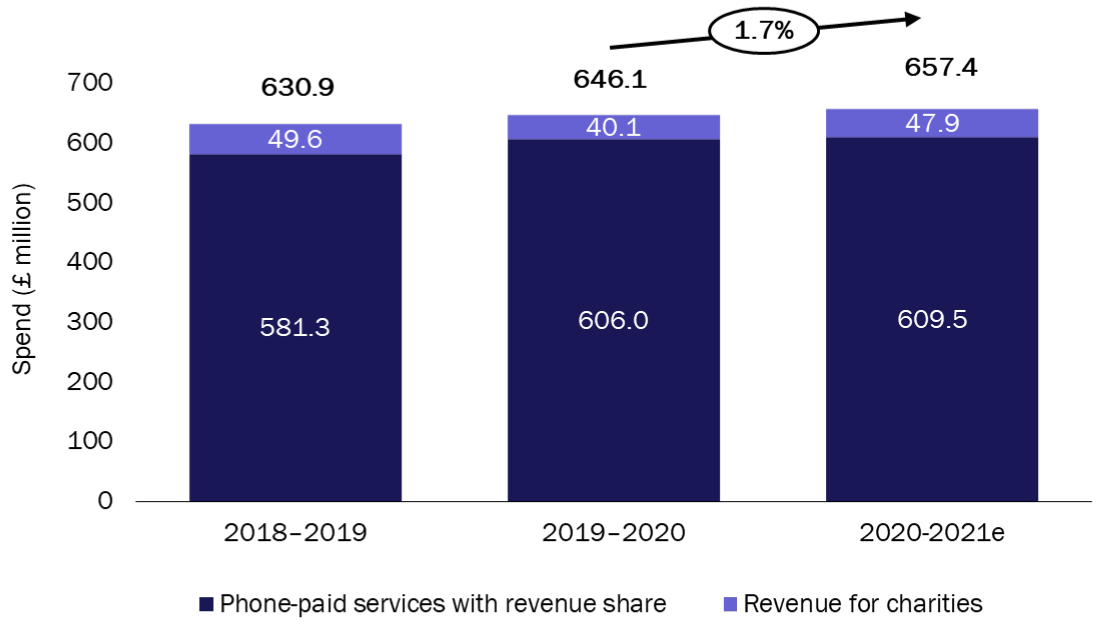
The COVID-19 pandemic is likely to have severe negative economic repercussions across the globe. However, initial reactions from industry stakeholders have indicated that consumers have not felt the effects yet, with few decreases in spending reported. Lockdown is responsible for the main changes in consumer behaviour:– with lockdown restrictions introduced in March 2020, a large proportion of the population worldwide remained at home and, as a result, people have been watching live TV and video content for longer and consuming more media in general.[32] As a result, some segments of the phone-paid services industry have seen a slight uplift in consumer spending during the first quarter of 2020–2021, though contractions in spend are expected later in the year as consumers feel the impact of a probable recession. Within these segments, particularly charity donations, we may see a displacement effect, with an increase in spend in the short-term counteracted by a decrease in spend in the longer term due to economic hardships and consumers feeling they have already spent or contributed enough. The following sub-sections discuss in more detail our expectations for consumer spend on phone-paid services over the period between April 2020 and March 2021.

32 Ofcom's 'Online Nation' 2020 report reported increases in average time spent online (up to 4 hours per day in April 2020 compared with 3.5 in September 2019), as well as increased broadband usage despite major platforms decreasing bitrate speeds for video streaming. This report is available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0027/196407/online-nation-2020-report.pdf.

5.2 Overall market size

After steady growth in 2019–2020 (+2.4% year-on-year), we forecast end-user spend to continue growing steadily over the next 12 months, up from £646.1 million in 2019–2020, to around £657.4 million in 2020–2021 (+1.7% year-on-year). The biannual schedule of key telethon events (see subsection 5.2 and Figure 5.3 for details), and a spike in donations related to COVID-19, are together expected to result in a continuation of the increasing spend on charity donations, up 19.5% year-on-year from £40.1 million in 2019–2020 to £47.9 million in 2020–2021. The revenue generated by the phone-paid industry is expected to increase by 0.6% to £609.5 million in 2020–2021.

Figure 5.1: End-user spend (excluding VAT), by type, UK, 2018–2019 to 2020–2021e (estimated)



Sources: Analysys Mason, Phone-paid Services Authority, 2020

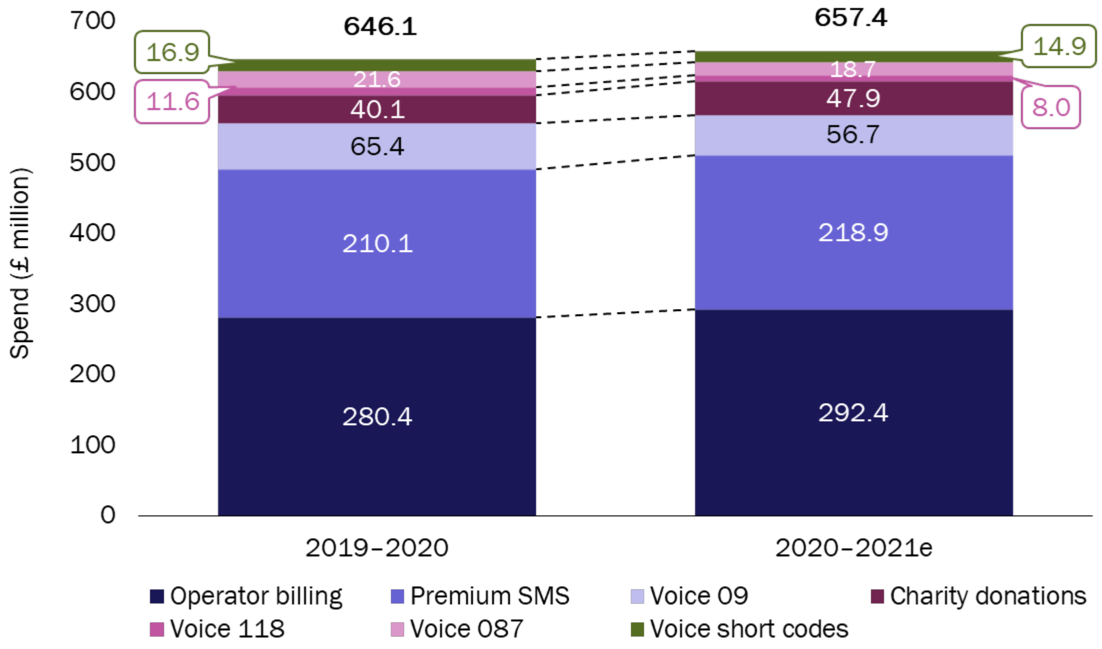
A high-level analysis of the evolution of end-user spend by key spending channel and service category is provided in subsections 5.2 and 5.3 below.

5.3 Spend by channel

Operator billing will continue to remain the largest spending channel in 2020–2021, with £292.4 million spent (up from £284.2 million in 2019–2020), followed by premium SMS (£218.9 million, up from £210.1 million). Both channels will capture an increasing share of total spending (77.8%, up from 76.5% in 2019–2020).

Figure 5.2 below provides a breakdown of end-user spend in 2019–2020 and a forecast for 2020–2021 by spending channel.

Figure 5.2: End-user spend (excluding VAT) by spending channel, UK, 2019–2020 and forecast for 2020–2021e (estimated)



Sources: Analysys Mason and Phone-paid Services Authority, 2020

The following key trends are expected to emerge during 2020–2021.

- End-user spend through operator billing will increase by £12.0 million (+4.3% year-on-year), which reflects spending growth that notably exceeds the £4.7 million (+1.7%) increase over the course of this year. Further agreements between select MNOs and major OTT providers are expected to be made by the end of 2020, which will likely have a notable impact on spend in 4Q 2020–2021. With lockdown measures in place during 1Q 2020–2021, many of the entertainment services that are paid for via operator billing have seen massive increases in usage, with one industry participant remarking that 1Q alone may have generated a year's worth of growth in spend on games and streaming services. We also expect an increase in operator billing usage for the gambling, betting and lotteries segment; following the ban on the use of credit cards for gambling (many services in this category currently convert users from operator billing payment mechanisms to the use of credit cards). While there is some uncertainty in this regard, most industry stakeholders were confident that this ban would not apply to operator billing – the ban was introduced to mitigate against problem gambling, and operator billing already has several protections in place that make problem gambling less prevalent through this payment mechanism.[33] We note though that a gambling advertising ban may be introduced in the medium

[33] Notably, phone-paid services have individual transaction limits of £40 per transaction, and monthly limits of £240 per month, as per Payment Services Regulation 2017

term as a result. We have assumed that no ban will apply within the timeframe of our forecast (up to 2022–2023).

- Premium SMS spend is expected to grow by an estimated £8.7 million between 2019–2020 and 2020–21. While competitions run by TV and radio broadcasters continue to be popular among consumers (radio competitions, in particular, are expected to increase in number), industry experts expect that after 2 exceptional years, growth will slow down as the market begins to approach saturation (although the number of radio competitions has increased significantly in the last few years), and to be lower than in 2019–2020 (+£35.7 million).

- Charity donations are expected to increase in 2020–2021, although this will represent a relative decline when compared with the last 'comparable' year, 2018-2019. Donations through phone-paid services remain heavily reliant on telethons, despite concerns about decreased viewership, and the biannual cycle of some of these events will favour events that traditionally generate the largest amounts (for example, Red Nose Day). COVID-19 will have several impacts, including limiting the range of activities that fundraisers can organise, but the pandemic has also led to the introduction of new fundraising events (for example, BBC's Big Night In is of particular note, raising £27.3 million on the night, of which £10.3 million was through phone-paid services), and this has meant a very strong 1Q 2020-2021 performance. The introduction of such fundraisers in response to the pandemic is likely to cause a displacement effect, with households donating relatively more in 2020–2021 and then cutting back on donations in 2021-2022 (see subsection 6.3). An estimate of donations raised through telethons this year can be found in Figure 5.3 below.

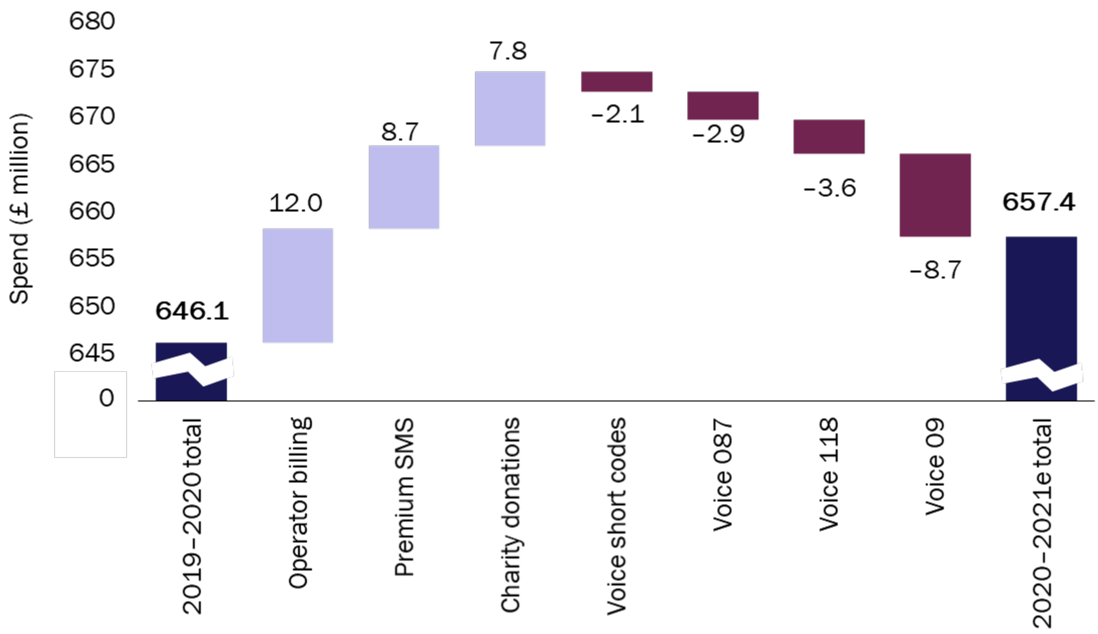
Figure 5.3: Reported donation totals for telethon events (2016–2020) and estimated totals in £ million (2020–2021e), UK

Telethon event	2016–2017	2017–2018	2018–2019	2019–2020	2020–2021e
Children in Need (November)	46.6	50.2	50.6	47.9	32.7 (estimate)
Red Nose Day (March)	82.2		63.5		40.8 (estimate)
Sport Relief (March)		38.2		40.5	
Stand Up to Cancer (October)	15.6		24.6		16.8 (estimate)
STV Appeal (September)	2.6	2.6	2.6	2.6	1.8 (estimate)
BBC Big Night In (April)					27.3 (reported)
Total telethons	147.0	91.0	141.3	91.0	119.4 (estimate)
Total phone-paid services revenue for charities	**38.6**	**37.5**	**49.6**	**40.1**	**47.9**

Sources: Analysys Mason and news reports, 2020

Spend on all voice-based services (including voice 09, voice 087, voice short codes and voice 118) is expected to decline, which is largely a continuation of the pattern observed in previous years. Growth in spending on voice 09 in 2019–2020 is expected to remain a short-term phenomenon, largely driven by a last push for revenue by ICSS providers before a ban on advertising for consumer protection. This channel will return to a long-term trend of decline caused by availability of alternatives and poor customer satisfaction, exacerbated by the inability to attract new users through advertising. Spend on directory enquiry services will also continue to decline, though the drop will be less than in 2019–2020 because price reductions have already been implemented. The decline in usage for some of these services is expected to be accelerated by lockdown because users of these services may be introduced to alternatives by 'tech-savvy' members of their households at a time when they are now able to be together at home.

Figure 5.4: End-user spend variation (excluding VAT), by spending channel, UK, 2019–2020 to 2020–2021e (estimated)



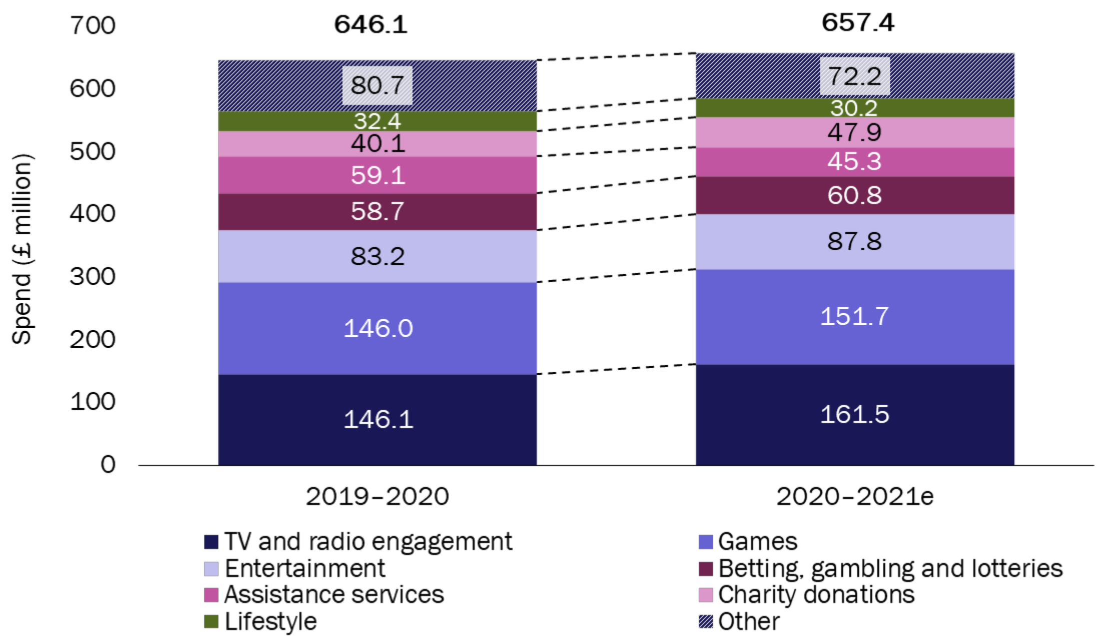
Note: This chart shows the total spend in 2019–2020 on the left-most bar and total spend in 2020–2021e on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel.

Sources: Analysys Mason and Phone-paid Services Authority, 2020

5.4 Spend by service category

Spend in the TV and radio engagement category is expected to further outstrip spend in the games category to become the clear leader in the phone-paid services market in 2020–2021, generating £161.5 million in consumer spend. The games segment continues to grow steadily, remaining significantly larger than all other categories, while spend on entertainment is also growing steadily and remains third highest. Figure 5.5 below provides a breakdown of end-user spend in 2019–2020 and 2020–2021 by spending channel.

Figure 5.5: End–user spend (excluding VAT), by service category, UK, 2019–2020 and 2020–2021e (estimated)



Sources: Analysys Mason and Phone-Paid Services Authority, 2020

The following key trends show how each service category will be impacted (see Figure 5.6 below).

- Spend on TV and radio engagement services will continue to increase during 2020–2021, driven by the continued success of broadcaster competitions that leverage premium SMS as a method to engage audiences. Growth in spend during 2020–2021 is expected to be +£15.4 million, lower than the additional £42.8 million generated between 2018–2019 and 2019–2020. This segment experienced exceptional growth during 2019–2020 and industry stakeholders do not believe this can be repeated. Audience numbers are likely to increase during 2020–2021 as a result of individuals spending more time at home but concerns over future incomes and the move towards free voting is also likely to negatively impact spend.

- Spend in the games category is expected to grow by £5.7 million. While we expect new agreements between select MNOs and large OTT providers to be finalised by the end of 2020, implementation and adoption times will likely have a limited immediate impact in 2020–2021. Such partnerships will boost the number of individuals downloading games through this spending channel. Games may benefit from increased usage during the lockdown period, though it remains be seen whether this will continue after lockdown has ended.

- Spend on entertainment services is also expected to continue to grow, driven by an increase in the number of subscribers to streaming services and boosted, to some extent, by lockdown and broader social-distancing.

Figure 5.6: End-user spend variation (excluding VAT), by service category, UK, 2019–2020 to 2020–2021e (estimated)

Note: This chart shows the total spend in 2019–2020 on the left-most bar and total spend in 2020–2021e on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by service category.

Source: Analysys Mason and Phone-paid Services Authority, 2020

As shown in Figure 5.6 above, the service categories that are expected to decline the most in absolute terms over the next 12 months include assistance services and sexual entertainment. Spend on assistance services will be primarily impacted by the sharp decline in the projected spend on directory enquiries (see subsection 4.7), as well as the further projected decline of call volumes to customer services and ICSS, and the continuous migration of service providers from voice 087 and 09 channels to cheaper or free alternatives.

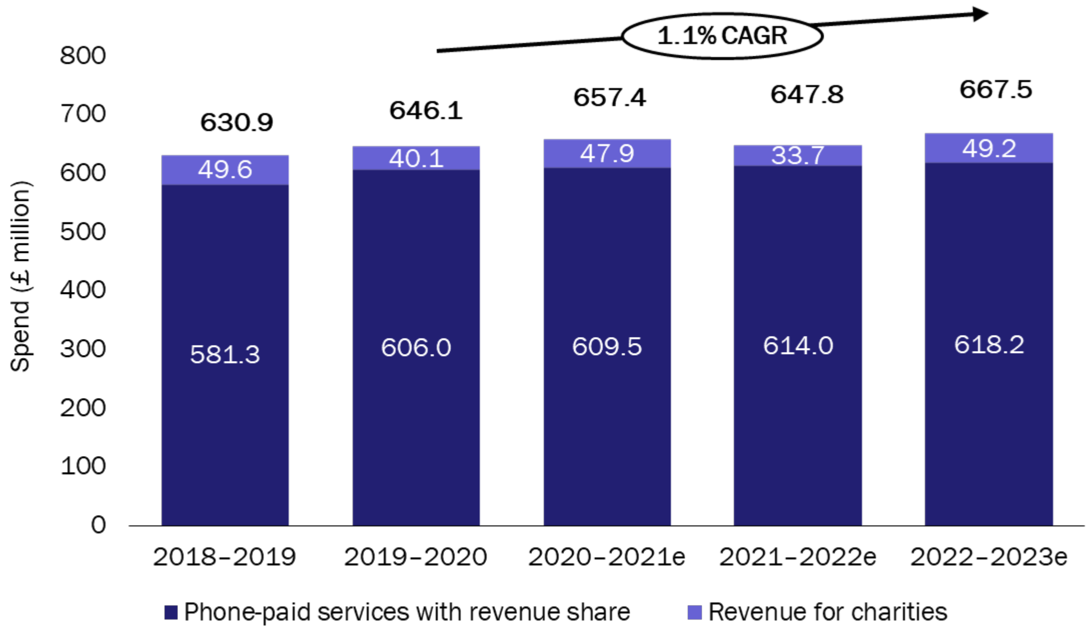
6. The phone-paid services market beyond 2020–2021

We expect the phone-paid services market to decline to £647.8 million in 2021–2022 (down by 1.5% year-on-year), primarily because of the impact of challenging macroeconomic conditions following the emergence of COVID-19, before recovering slightly in 2022–2023 to reach £667.5 million (up 3.1% year-on-year). We expect consumer spend on TV and radio engagement, games, entertainment, betting, gambling and lotteries services to continue to increase over the forecast period (although growth for some of these categories will be limited in 2021–2022), while charity donations will continue to reflect the seasonality of telethons, which will be affected by economic contraction. Spend on voice-based services and on services relying on limited marketing and advertising will continue to decline, though the scale of this decline may be reduced as a small core of loyal users continues to use the service.

6.1 Future evolution of consumer spend

We forecast end-user spend to continue to grow in the medium-term, from £646.1 million in 2019–2020 to £667.5 million in 2022–2023, albeit at a slower pace than in previous years (at a CAGR of 1.1% between 2019–2020 and 2022–2023). Charity donations via telethon events are expected to increase at a modest CAGR of 7.1%, from £40.1 million in 2019–2020 to £49.2 million in 2022–2023 (although this will include a significant dip in 2021–2022). The revenue generated by the phone-paid industry will grow from £606.0 million in 2019–2020 to £618.2 million in 2022–2023 (at a CAGR of 0.7%).

Figure 6.1: End-user spend (excluding VAT), by type, UK, 2018–2019 to 2022–2023e



Sources: Analysys Mason, Phone-paid Services Authority, 2020

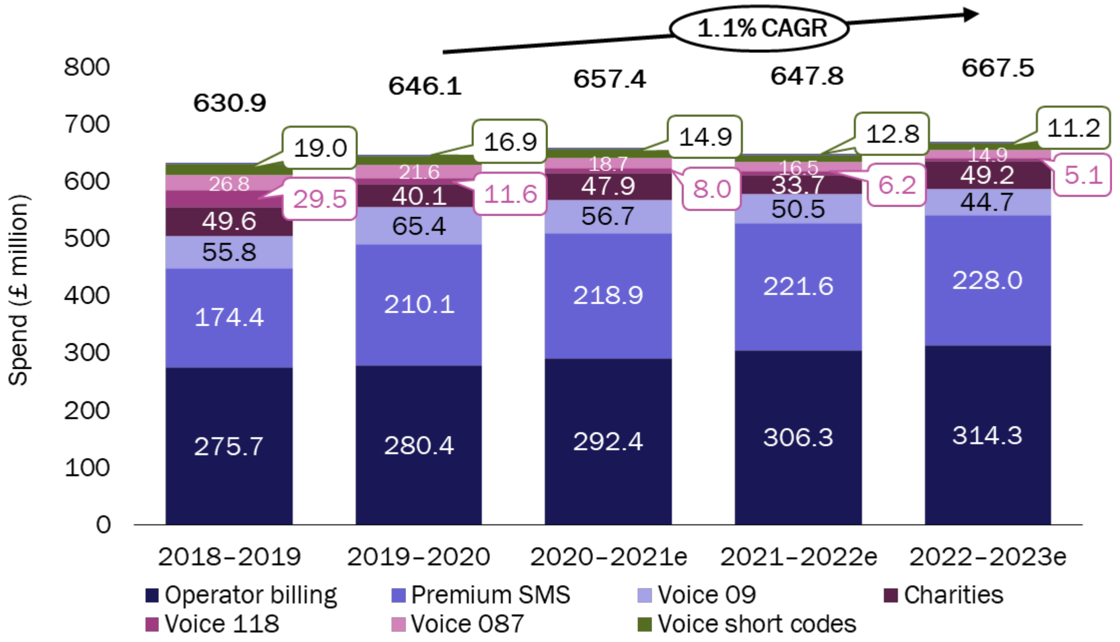
A high-level analysis of the evolution of end-user spend by key spending channel and service is provided in subsections 6.2 and 6.3 below.

6.2 Spend by channel

Operator billing will continue to increase steadily, driven by the continuously strong performance of games and entertainment services. Operator billing will remain the largest spending channel , capturing £314.3 million in 2022–2023 (or 47% of total spend), followed by premium SMS (£228.0 million). Both channels will continue to capture an increasing share of total spending (81%, up from 76% in 2019–2020).

A breakdown of end-user spend by spending channels between 2019–2020 and 2022–2023 is provided in Figure 6.2 below.

Figure 6.2: End-user spend (excluding VAT) by spending channel, UK, 2018–2019 to 2022–2023e (estimated)



Sources: Analysys Mason, Phone-paid Services Authority, 2020

The following key trends can be observed by spending channel.

- Spend accrued by operator billing is expected to grow at a CAGR of 3.9% between 2019–2020 and 2022–2023. Further agreements between select MNOs and major OTT providers are expected to be made by the end of 2020, which will mechanically expand the addressable market for operator billing, the main effects of which will be felt in 2021–2022. In addition, a shift in consumer spending from premium SMS to operator billing for the TV and radio engagement segment is to be expected to take place in the next 12–18 months, as dedicated apps support frictionless participation in competitions and operator billing can provide more price points than premium SMS. Operator billing will likely return to a steadier growth in 2022–2023 – emerging 'real-world' services (for example, m-tickets, digital newspapers subscriptions and parking) are potential key drivers for further growth, though the timeline for their introduction remains unclear due to the complexities of developing the required technical capabilities and the unproven business case for content providers. We have assumed that their impact on operator billing revenue will be negligible within the timeframe considered.

- Spend via premium SMS will continue to grow, driven by the strong performance of TV and radio engagement services, although growth will slow down as the market approaches saturation. The expected migration of some radio broadcast competitions from premium SMS to operator billing in the next 12–18 months will also shift spend away from premium SMS. Premium SMS is forecast to capture £228.0 million in end-user spend by 2022–2023 (at a CAGR of 2.8%).

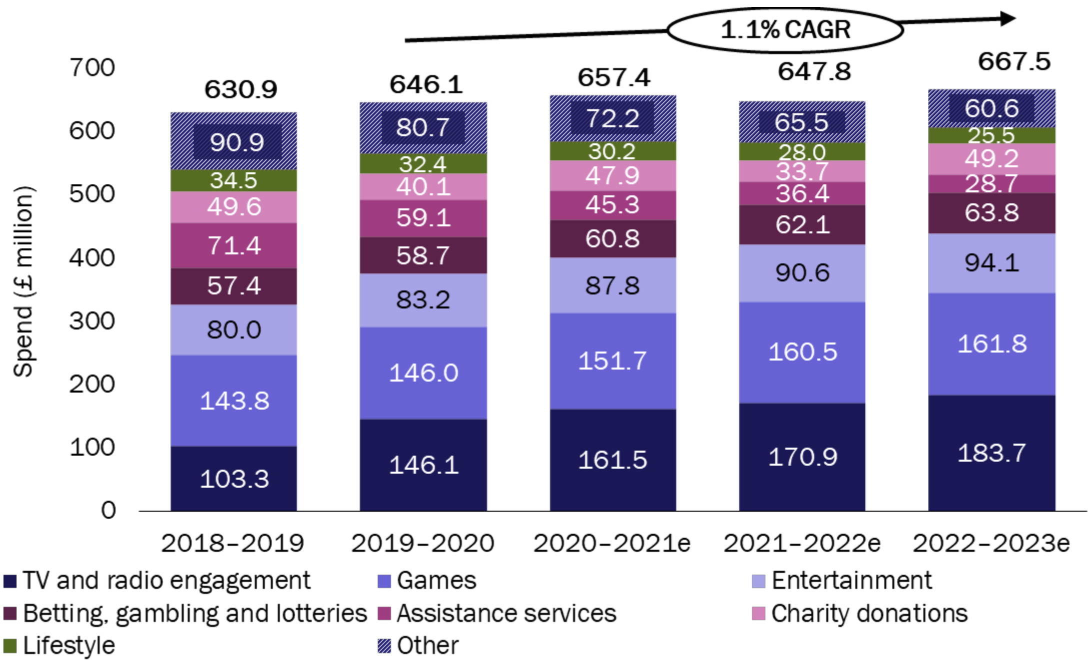
- Spend on voice 087 will continue to fall due to a declining user base. While the role of voice 087 numbers is currently under review by Ofcom, no public decision has been made yet at the time of writing and is unlikely to be made in the medium-term. Our conversations with industry participants suggest that it is unlikely that voice 087 numbers will be terminated, especially in the medium-term, and even if they are terminated, there would be a long lead-time to implementation. Our forecasting exercise assumes that voice 087 numbers will not disappear altogether within our timeframe. End-user spend on services that use voice 09 and mobile voice short codes is expected to continue to decline, albeit at a slower pace than for other voice-based services, due to their use by some broadcast competitions.

- Following a major drop between 2018–2019 and 2019–2020, the rate of decline of end-user spend in directory enquiry services (voice 118) is expected to remain relatively constant beyond 2020–2021.

6.3 Spend by service category

As discussed above, TV and radio engagement will continue to be the largest service category in terms of end-user spend in the phone-paid services market during 2021–2023, generating £183.7 million in 2022–2023. The games and entertainment segments will also continue to steadily increase to be the second and third largest categories in terms of spend, respectively. These three categories are joined by betting, gambling and lotteries, as well as charity donations, as the only areas of growth over the forecasted timeframe.

Figure 6.3: End-user spend (excluding VAT) by service category, UK, 2018-19 to 2022–2023e (estimated)



Sources: Analysys Mason and Phone-paid Services Authority, 2020

The following key trends by service category have emerged from our study.

- Spend on TV and radio engagement services may suffer from the negative economic impacts on consumer spending following the emergence of-COVID-19, but the relatively low entry point of many of these services will provide some resistance to these effects. One interviewee felt that a severe economic crisis would severely threaten spend in this category, while others felt that the attractiveness of winning prizes would increase as a result of an economic downturn. Overall, we believe that these effects should roughly cancel each other out and lead to steady growth, particularly because price increases in 2019–2020 did not see any decrease in consumer engagement (see subsection 4.1 for more details). This suggests that these competitions are relatively price-insensitive. Along with the previously mentioned boost from a new operator billing agreement, TV and radio engagement will also see growth through the premium SMS channel, and this is a service that seems well-suited to benefit from the increased engagement afforded by RCS if it becomes adopted more widely.

- Spend in the games segment is expected to grow by £10.1 million between 2021 and 2023. This forecast is informed by the assumption that despite additional usage during lockdown, this will have limited impact as retention rate of new customers will be low. Spending is likely to be boosted by both steady organic growth and an expansion of the addressable market due to new agreements between select MNOs and OTT providers in 2020, but this growth will be slightly mitigated by a decline in spend during the economic downturn; mobile games are considered luxury purchases by many consumers.

- Spend on entertainment services will grow steadily over the forecast period, reaching £94.1 million by 2022–2023. The popularity and adoption of high-quality digital services has been accelerated by increased consumption during the lockdown period, and there is likely to be significant retention of these consumers during 2021–2022. The popularity of some mobile plans that include subscriptions to entertainment services is expected to drive growth in the coming years.

- Betting, gambling and lotteries is the only other category with consistent growth in spending over the forecast period. While there is uncertainty over the inclusion of operator billing in the recent credit card ban in gambling (see subsection 4.2 for more details), as well uncertainty around a future ban on gambling advertising, we have assumed that these will not be implemented within the timeframe considered. Spend on society lotteries is expected to grow significantly, with merchants eventually able to navigate through several levels of regulation to convince charities to come on-board. As a result, we forecast growth of £6.3 million between 2020–2021 and 2022–2023. Some industry participants have suggested that there is scope for this segment to double. However, it would now take exceptional circumstances to reach this level of spend in the medium-term given the likely economic impact of COVID-19.

- Charity donations will eventually reach £49.2 million in spending in 2022–2023, but only after an expected decline to £33.7 million in 2021–2022. This decline is a reflection of the biannual nature of the segment, exacerbated by the displacement effect of short-term increases in donations during 2020–2021 (many people will feel economic hardships while having already contributed to appeals in 2020–2021, which will result in a large reduction in spend in 2021–2022). We expect this spend to recover progressively in 2022–2023. Further growth is likely to be dependent on recurring donations because donations via telethon events are expected to reach saturation.

- All other categories, including voice-based services and other services with limited advertising and marketing will face decline in spend as users move to alternative services. As discussed in subsection 5.3, this may be accelerated during the COVD-19 pandemic as 'tech-savvy' members of households pass on their knowledge of alternatives to those who are less aware. The small base of users that are not prepared to switch to alternatives will help to limit the decline in spend on those services in the long-term.

7. Consumer analysis

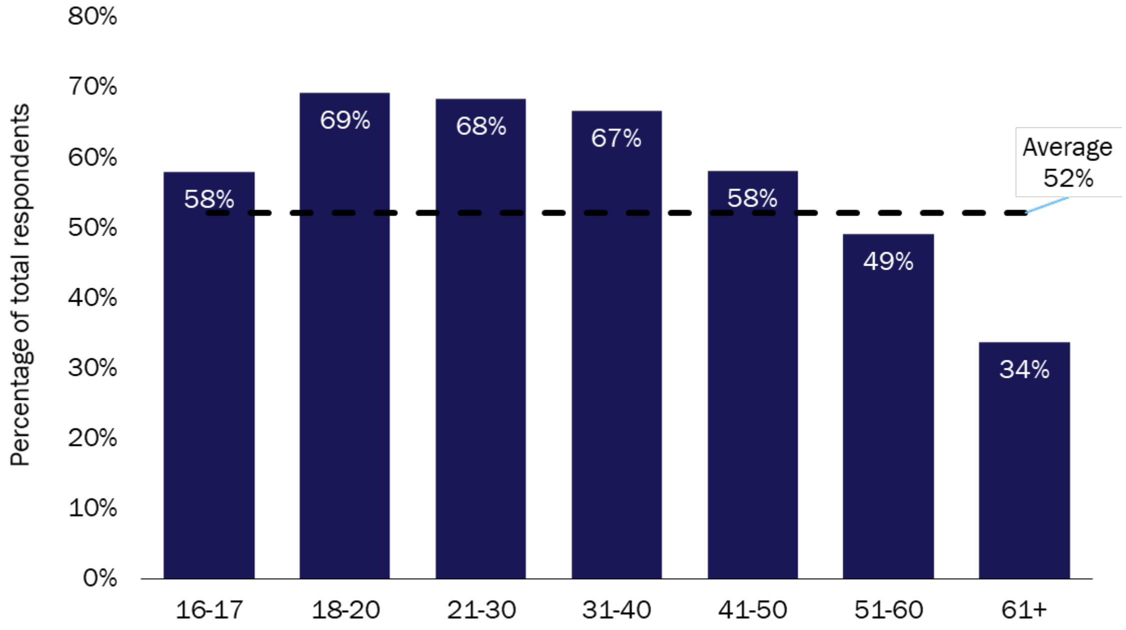
Our consumer survey suggested that 52% of the UK population aged 16 or above used at least one phone-paid service in 2019–2020. The key drivers of use were largely unchanged compared with last year and include convenience, affordability and impulse purchasing. 24% of users reported problems with these services in the last 12 months, including difficulty with using the services, differences between what was advertised and what they received, and price, all of which are consistent with the results that we reported last year. An increase in problems relating to charges and subscriptions without consent is of concern, but the extension of special conditions to all subscription services in November 2019 is expected to produce positive benefits in the medium term. As was the case last year, survey respondents reported the largest number of problems when using sexual entertainment services and personal and relationship services, while survey respondents reported the fewest number of issues when making charity donations. Overall, the Net Promoter Score for the phone-paid services industry (–17) saw a significant improvement compared with last year (–26) and a few select services (such as charity donations and entertainment) performed relatively well (equal to or above NPS = 0).

7.1 Demographics

Our research, including a survey of 9601 individuals, indicates that phone-paid services are used by 52% of the UK population (16 years of age or above), which represents a decline from the 58% reported in 2018–2019. We have attempted to control for bias by using a nationally representative sample in terms of age band, gender and regional distribution. However it is difficult to mitigate against 'connected consumer' bias, with respondents to our online consumer survey tending to be 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 our survey results suggest.

While the survey results did not imply any significant variation in usage by gender or region, penetration does vary across age bands. Figure 7.1 below shows that service penetration is highest among those aged 18–20 because a large number of the services in the entertainment and games categories are likely to appeal to younger age groups. However, the variation of penetration of phone-paid services across age groups between 18 to 40 years is very narrow (at 4%) and still remains relatively narrow when including those aged 16–17 and 41–50 (a maximum of 11%, rising to 20% when the 51–60 age group is included). The penetration of phone-paid services in the 61+ age group, at 34%, is much lower than in other age groups and for the UK overall.

Figure 7.1: Penetration of phone-paid services, by age group, UK, 2019–2020



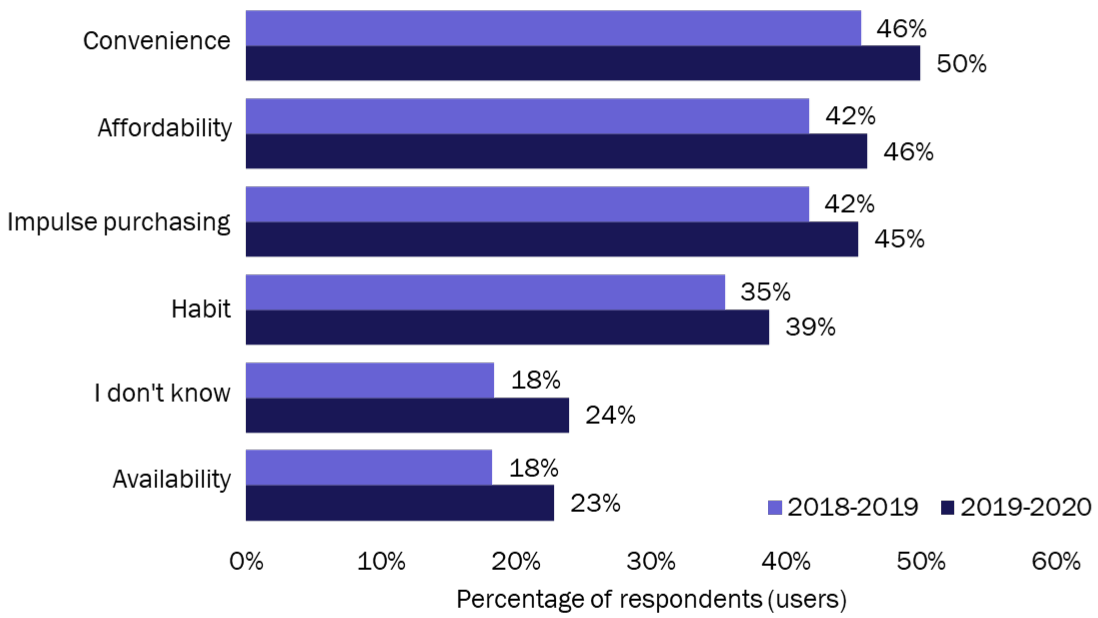
Base: total sample of respondents (*n* = 9061). Question: "Based on your understanding of phone-paid services, which of the following categories of services have you used and paid for via your mobile phone bill or landline phone bill over the last 12 months?" [multiple choice]

Source: Analysys Mason, 2020

7.2 Drivers of use

Multiple factors have contributed to phone-paid service usage during 2019–2020. As shown in Figure 7.2, 50% of respondents reported that convenience was the main reason for using these services, followed by price (46%) and impulse purchasing (45%). 39% of respondents continue to use these services out of habit. For comparison, convenience was the main reason for using these services in 2017–2018 and 2018–2019, and impulse purchasing was the second most-common reason given last year, with price placed in third position. The share of respondents citing each type of driver has increased compared to last year, suggesting higher availability of services valued by users and growing confidence in phone-paid services overall.

Figure 7.2: Drivers of use among phone-paid services users, UK, 2019–2020



Base: respondents who have used the listed PPS in the past 12 months (*n* = 5000). Question: "Why did you use the service/content?" [multiple choice].

Source: Analysys Mason, 2020

Our interviews with 17 industry participants suggest that consumer confidence in phone-paid services has increased during the last few years, though there is still more that could be done to reduce complaints. Industry participants acknowledge the impact of negative publicity in the past, and there is a sense that customers are still likely to believe that unexpected charges related to phone-paid services are part of a scam (when the true cause is often a lack of clarity or understanding of the products and charges). Some industry participants suggested customer confidence could be improved and usage increased if service providers were able to raise customer awareness of the availability of helplines, as well as familiarise consumers with universal terminology used across the industry.

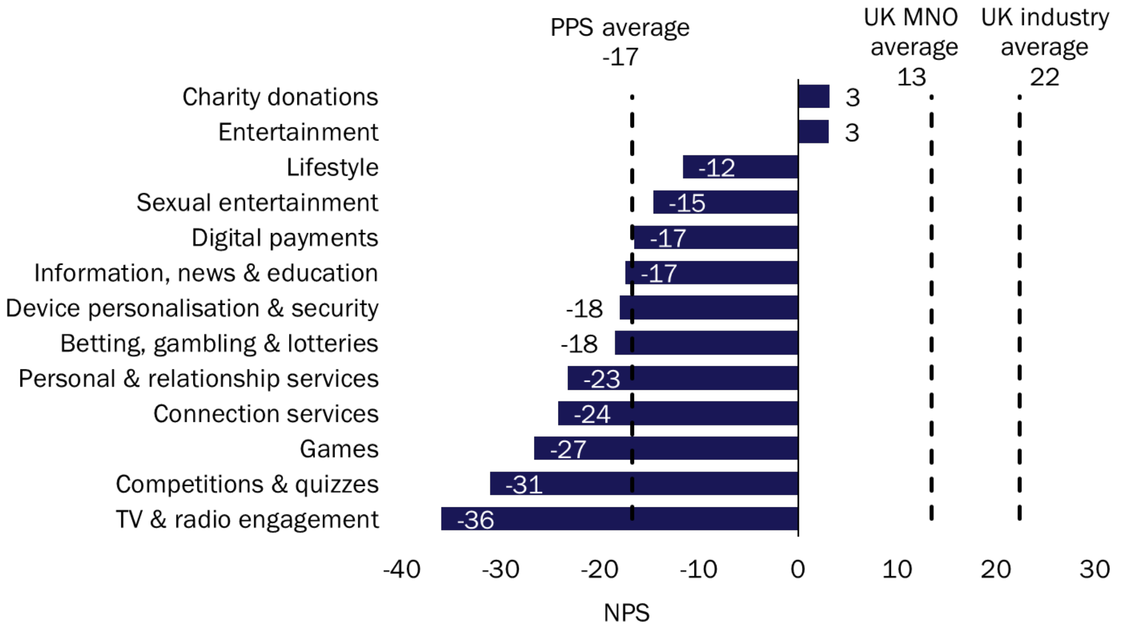
7.3 Net Promoter Scores (NPS)

The NPS is an industry standard index to measure the willingness of customers to recommend products or services to others. The overall NPS across phone-paid services for 2019–2020 was –17, which is significantly higher than the NPS for 2018–2019 (–26). In fact, the NPS for every category improved this year.

As shown in Figure 7.3, charity donations achieved the highest NPS in the phone-paid services industry (with an NPS of 3, which is +12 from –9 last year), followed by services in the entertainment category (with an NPS of 3, up from ~0 last year). There is a significant gap between the NPS for entertainment services and the next service category, lifestyle (NPS of –12). The worst-performing categories are TV and radio engagement (with an NPS of –36, up from –43 last year), and competitions and quizzes (NPS of —31, from –47 last year).

In comparison, Analysys Mason's 2019 *Connected Consumer Survey*[34] found that UK mobile network operators in the UK achieved an overall NPS of 13, while the UK Customer Satisfaction Index[35] run by the Institute of Customer Service reported an average NPS score across all industries of 22 as of January 2019. Tech companies such as Apple, Amazon and Netflix have NPSs above 60.[36]

Figure 7.3: Net Promoter Score, by service category, UK, 2019–2020



Sources: Analysys Mason, UK Institute of Customer Service, 2020

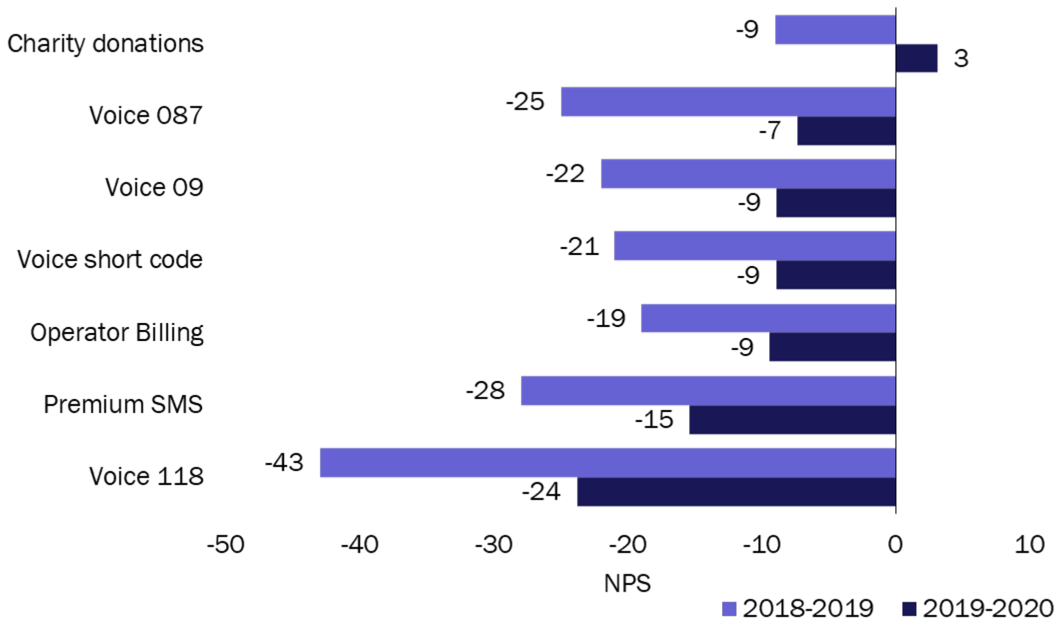
Results can also be broken down into spending channels, by assigning each NPS survey response to the payment channel that it was delivered through. Charity donations received the highest NPS (3, compared to –9 last year). All other payment channels have received negative NPS results, with voice 087 closest (–7, from –25 last year) and voice 118 furthest (–25, from –43 last year). As with the service categories, the NPS for each payment mechanism improved compared to last year.

34 Analysys Mason's 2019 *Connected Consumer Survey* collected data from 1000 connected consumers within the UK. The average NPS for an MNO was calculated using the same question and approach to this Annual Market Review and covers the MNOs EE, Vodafone, O2 and Three. Read more about the *Connected Consumer Survey* at: https://www.analysysmason.com/research/content/reports/mobile-satisfaction-europe-usa-2019-rdmm0/.

35 Available at: https://marcommnews.com/wp-content/uploads/2019/03/2018-Report-UK-Customer-Satisfaction-Index.pdf.

36 NICE (2018), *Net Promoter Benchmarks*. Available at: http://info.nice.com/rs/338-EJP-431/images/NICE-Satmetrix-infographic-2018-b2c-nps-benchmarks-050418.pdf.

Figure 7.4: Net Promoter Score, by spending channel, UK, 2019–2020



Source: Analysys Mason, 2020

7.4 Problems and impact

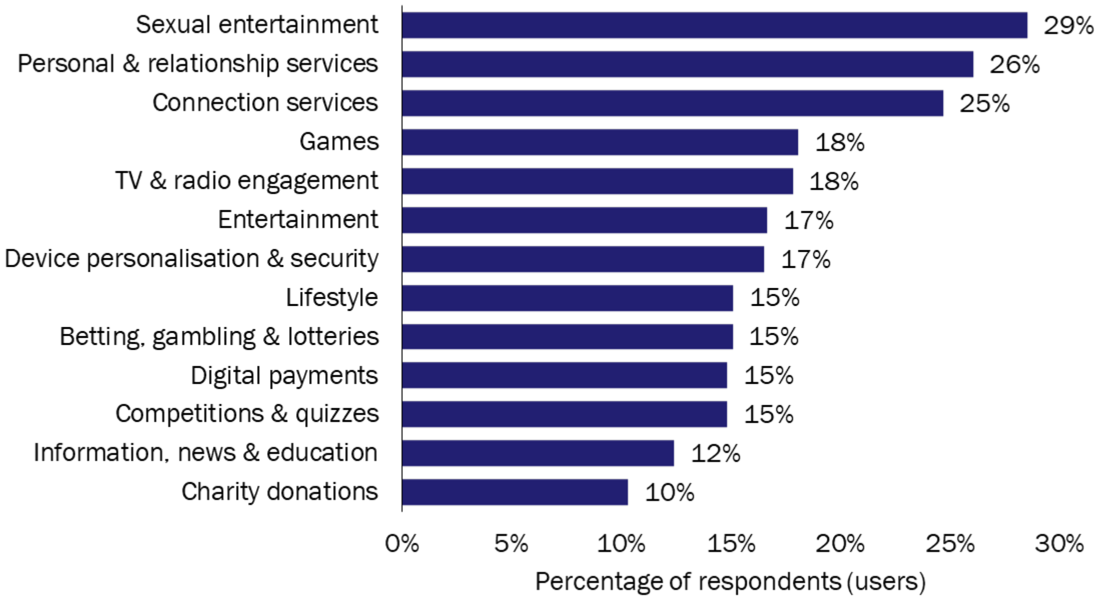
Key problems encountered

On average, 24% of the respondents who have used phone-paid services in the past 12 months reported encountering a problem with at least one of the services. This is broadly similar to the percentage of complaints reported in the 2018–2019 Annual Market Review (25%). This is a positive change for the industry, given that complaints had increased between 2017–2018 and 2018–2019, and reflects a feeling of improved consumer confidence from most industry stakeholders.

Sexual entertainment, personal and relationship services and connection services were the categories in which the highest share of respondents encountered problems during the past 12 months (29%, 26% and 25%, respectively), as shown in Figure 7.5, though the actual types of problems encountered do not differ significantly from other phone-paid services These same categories accounted for the highest share of consumer concerns last year, with the higher percentage of problems in these sectors likely caused by a small number of service providers with a poor customer service track record. These companies can foster consumer distrust either by not seeking consent from consumers or by not properly informing consumers about the service. The Phone-paid Services Authority has taken regulatory action against a number of providers of such services, and interviews with industry participants indicate that a number of these have left the UK phone-paid services market as a result.

Within each service category, respondents that use subscription services tended to report more problems than those respondents that use these services for one-off transactions. For example, in the competitions and quizzes service category, 36% of users of a subscription service reported encountering a problem in the past 12 months compared with just 13% of respondents that made a one-off purchase. Similarly, the majority of problems with donations seem to be from subscriptions (29% versus 6%).

Figure 7.5: Share of respondents that encountered a problem, by service category, UK, 2019–2020

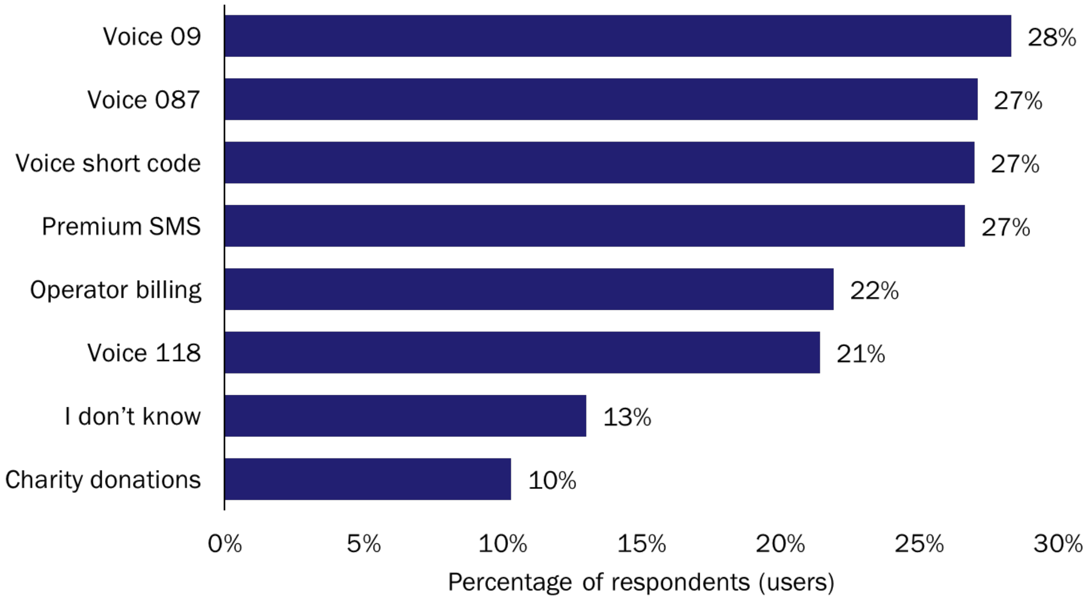


Base: respondents who have used any PPS from the listed PPS categories in the past 12 months (*n* = variable). Question: "Have you experienced any problem(s) when using the service in the past 12 months?"

Source: Analysys Mason, 2020

Survey results that reveal the problems encountered by consumers when using services were broken down by mapping service categories against the spending channels that they are delivered through. These results suggest that the voice 09 channel accounts for the largest share (28%) of respondents' problems (see Figure 7.6), followed by voice 087, voice short code and premium SMS (all around 27%). These four payment mechanisms also saw the largest share of problems reported by survey respondents last year, although each has improved since then. Voice 118 was the only category to see an increased percentage of complaints reported in the survey (+2% from 19% last year). Services delivered by voice 09 and voice 087 typically include customer services, help lines and talk services, while voice 118 represents directory enquiry services; these channels account for the majority of spend in the three most-problematic categories in Figure 7.5. 22% of survey respondents that used services leveraging operator billing reported encountering problems (roughly the same as last year), which are likely to have been caused by continued poor consumer awareness and understanding of operator billing services.

Figure 7.6: Share of respondents that encountered a problem, by spending channel, UK, 2019–2020

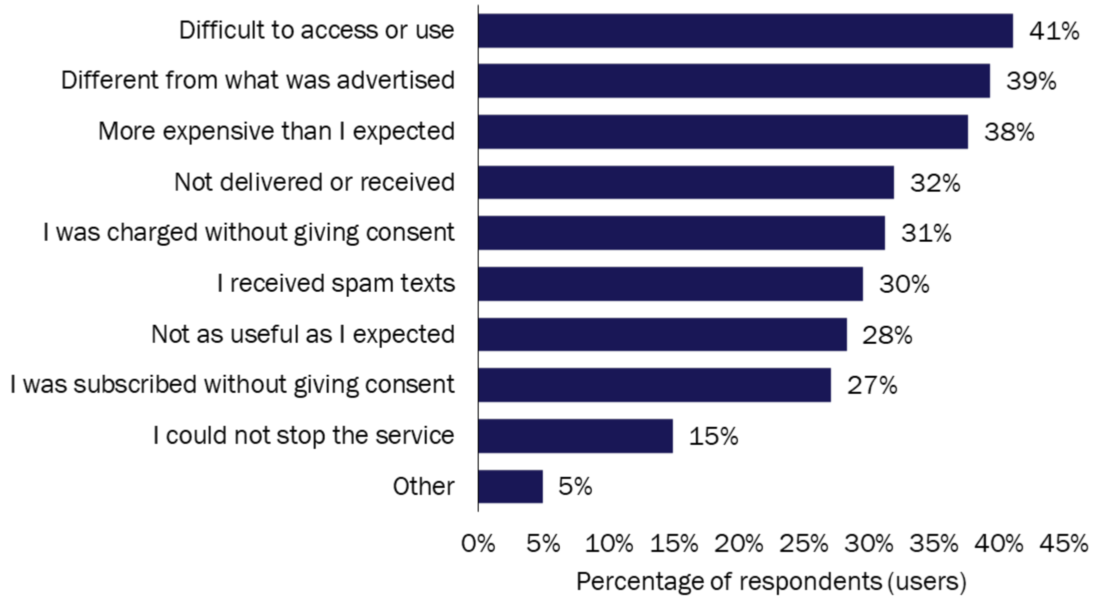


Base: respondents who have used the listed PPS in the past 12 months (*n* = variable, between 356 for the 118-number range to 3141 for operator billing). Question: "Have you experienced any problem(s) when using the service in the past 12 months?"

Source: Analysys Mason, 2020

The three most-commonly cited problems reported by respondents were difficulties in access or using the service, differences from what was advertised, and the price (or 'bill shock'), reported by 41%, 39% and 38% of respondents, respectively (see Figure 7.7). This is in line with remarks from industry participants about a lack of customer familiarity and awareness of pricing structure and the nature of services, particularly with access charge fees for premium rate voice services. Other commonly cited problems include undelivered services, charges or subscriptions without consent, and that the service was not as useful as expected. These problems further indicate a need to educate customers and suggest a potential divergence between consumers' expectations of a service (in terms of usefulness) and their experience. There may also be an element of customers being misled by some providers. The share of respondents complaining about subscriptions remains significant, but the extension of special conditions to all subscription services in November 2019 is expected to produce positive benefits in the medium term. The types of problems reported by respondents do not vary significantly by service category or by spending channel.

Figure 7.7: Share of respondents that encountered a problem, by the type of problem, UK, 2019–2020



Base: respondents who have used the listed PPS in the past 12 months and encountered a problem with at least one service (*n* = 1279). Question: "Can you please identify from the following what this (these) problem(s) was (were)?" [multiple choice]

Source: Analysys Mason, 2020

Impact of problems on usage, trust and NPS

Survey results indicated that the majority of services that respondents have had issues with have also had performed poorly in terms of consumer trust (79%), though the extent to which this has translated into a reduction in service usage was considerably lower (31% of services, a significantly lower share than 65% of services in 2018–2019). There is an unusual relationship between the number of problems experienced and the average NPS score, with one problem having virtually no impact on NPS score, and three or more problems having a less significant impact on NPS than for two problems. This may reflect some distortion due to a small number of respondents recording several problems despite being users of numerous phone-paid services: these 'heavy users' may be relatively happier with phone-paid services than users that have encountered only two problems despite limited usage of phone-paid services, for example. This is consistent with the relatively limited impact of problems on service usage.

Figure 7.8: Impact of a problem on a respondent's usage of and trust in the service, UK, 2019–2020

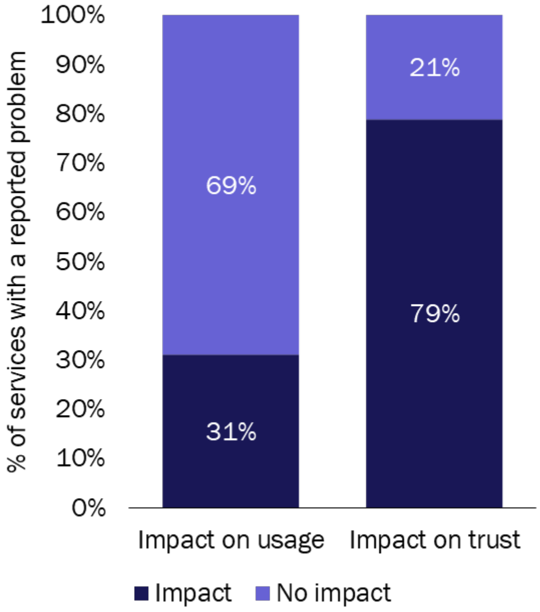
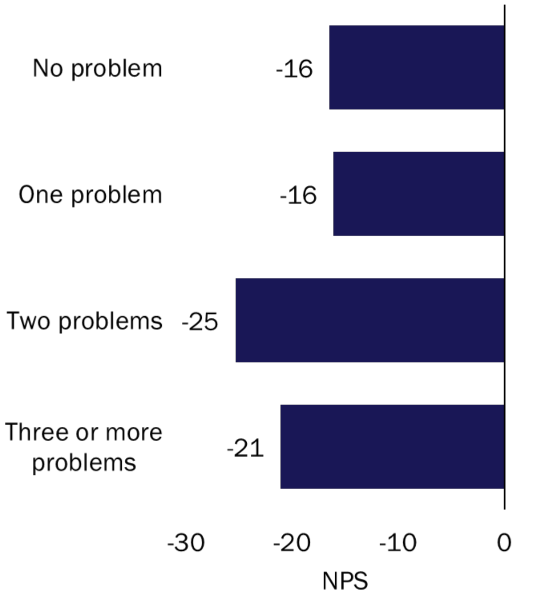


Figure 7.9: Overall NPS by number of problems encountered when using the service, UK, 2019–2020



Base: total number of phone-paid services that respondents have used in the past 12 months (*n* = 28 170) and the number of services which respondents encountered at least one problem (*n* = 6349).

Source: Analysys Mason, 2020

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 2018–2019 report. It includes 13 service categories broken down into 47 service types.

Figure A.1: Phone-paid services taxonomy, by service category and type, 2019–2020

Service category	Service type	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.
	Online competitions	• Entry to competitions advertised online (for example, on a website or through email

Service category	Service type	Service type definition
Competitions and quizzes		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.
Device personalisation and security	Ringtones, ring-back tones, wallpapers	• Purchase and download of ringtones, ring-back tones and wallpapers for device personalisation. • Paid for via premium SMS or operator billing.
	Security	• Purchase and download of a 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	• Alternate 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.

Service category	Service type	Service type definition
	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 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 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 available). • Paid for via premium SMS or operator billing.
	In-game credit top-ups	• Purchase of in-game credit, such as in-game currency (such as gold or gems), that can be used to purchase in-game items or rewards. • Paid for via premium SMS or operator billing.
Information, news and education	Weather	• Voice service used to access weather information. • 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 information. • 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

Service category	Service type	Service type definition
		• 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

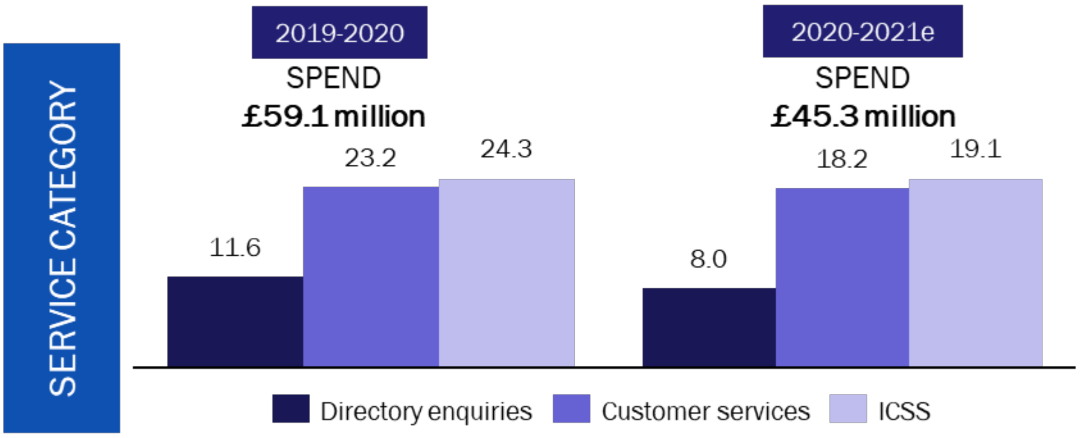
Service category	Service type	Service type definition
		presented as a voice short code, via premium SMS, or through operator billing.
	Tarot/astrology services	• Service used to access services such as horoscopes and, tarot card readings. • Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, via premium SMS, or through operator billing.
Sexual entertainment	Glamour pics	• Access to and/or download of revealing or nude photos. • Paid for via premium SMS or operator billing.
	Adults pics	• Access to and/or download of hardcore and explicit photos. • Paid for via premium SMS or operator billing.
	Adults videos	• Access to and/or download of hardcore and explicit videos, • Paid for via premium SMS or operator billing.
	Adults cams	• Purchase of tokens to access online video streams. • Paid for via premium SMS or operator billing.
	Adults 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	Broadcaster competitions	• Entry to an (online or offline) competition run by a TV or 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.
	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 show host	• Text-based engagement with the presenter of a TV or radio show. • Paid for via premium SMS.

A.2 Service-level data

This sub-section provides additional market data across the 13 service categories, namely:

- For each service category: the spend by service type in 2019–2020 and 2020–2021e, and associated year-on-year growth rates.
- For each service type: the spend, number of users, implied yearly ASPU (Average Spend Per User), 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 score.

ASSISTANCE SERVICES



DIRECTORY ENQUIRIES

2019-2020

SPEND £11.6 million	USERS 0.8 million	ASPU £14.7
21% Users w/problems	13% Users w/trust impacted	- 24 NPS score

CUSTOMER SERVICES

2019-2020

SPEND £23.2 million	USERS 2.7 million	ASPU £8.7
21% Users w/problems	10% Users w/trust impacted	- 29 NPS score

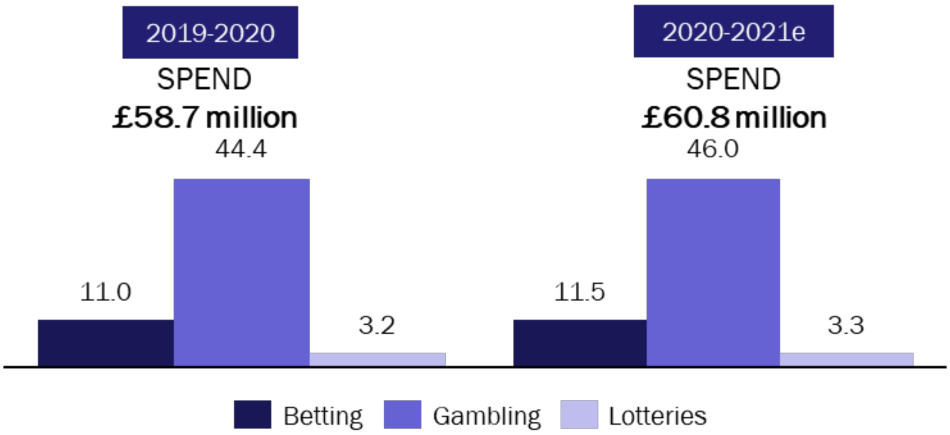
INFORMATION, CONNECTION AND/OR SIN+GNPSOTING SERVICES (ICSS)

2019-2020

SPEND £24.3 million	USERS 1.7 million	ASPU £14.6
25% Users w/problems	17% Users w/trust impacted	- 18 NPS score

BETTING, GAMBLING & LOTTERIES

SERVICE CATEGORY



BETTING

2019-2020

SPEND £11.0 million	USERS 2.6 million	ASPU £4.3
11% Users w/problems	5% Users w/trust impacted	- 23 NPS score

GAMBLING

2019-2020

SPEND £44.4 million	USERS 3.0 million	ASPU £14.7
16% Users w/problems	8% Users w/trust impacted	- 25 NPS score

LOTTERIES

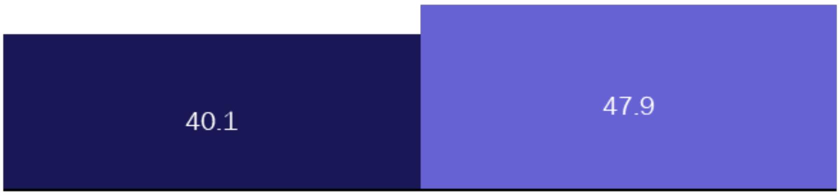
2019-2020

SPEND £3.2 million	USERS 1.3 million	ASPU £2.4
12% Users w/problems	5% Users w/trust impacted	- 9 NPS score

CHARITY DONATIONS

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£40.1 million**	SPEND **£47.9 million**



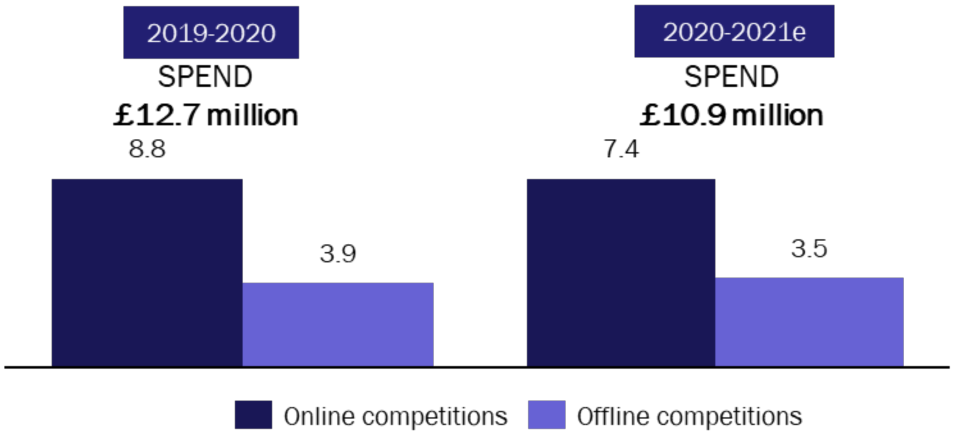
DONATIONS

2019-2020

SPEND **£40.1 million**	USERS **6.2 million**	ASPU **£6.5**
10% Users w/problems	5% Users w/trust impacted	+ 3 NPS score

COMPETITIONS & QUIZZES

SERVICE CATEGORY



ONLINE COMPETITIONS

2019-2020

SPEND £8.8 million	USERS 0.2 million	ASPU £45.4
16% Users w/problems	9% Users w/trust impacted	- 27 NPS score

OFFLINE COMPETITIONS

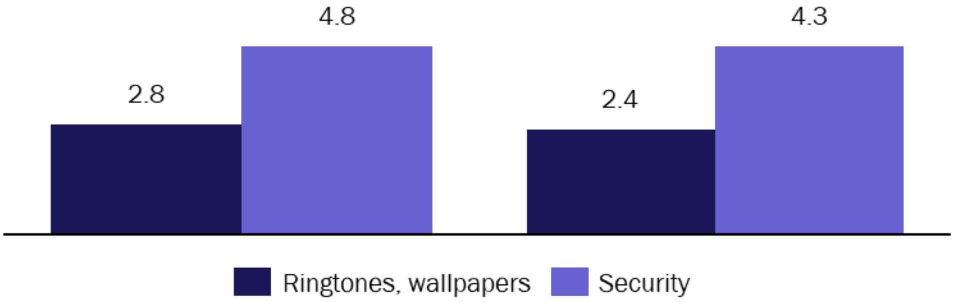
2019-2020

SPEND £3.9 million	USERS 1.4 million	ASPU £2.8
13% Users w/problems	7% Users w/trust impacted	- 36 NPS score

DEVICE PERSONALISATION & SECURITY

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£7.5 million**	SPEND **£6.6 million**



RINGTONES, WALLPAPERS

2019-2020

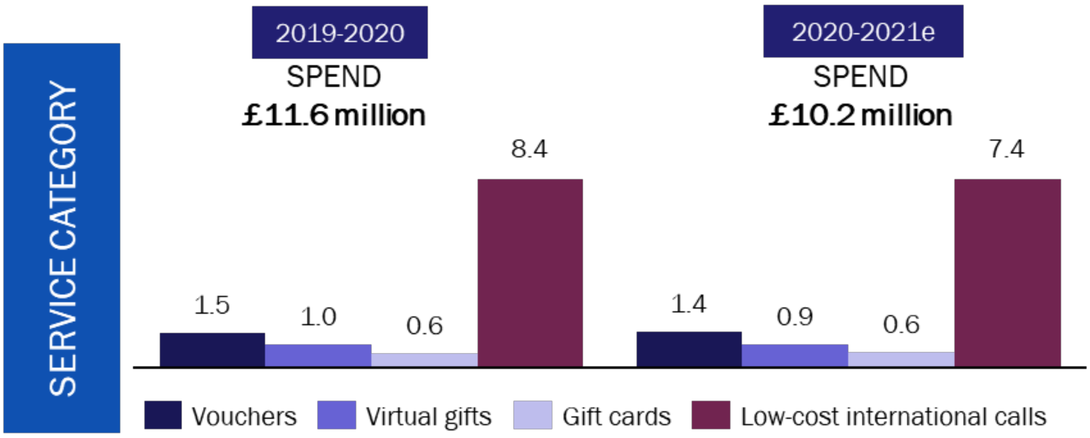
SPEND **£2.8 million**	USERS **1.9 million**	ASPU **£1.5**
12% Users w/problems	**7%** Users w/trust impacted	**- 31** NPS score

SECURITY

2019-2020

SPEND **£4.8 million**	USERS **1.5 million**	ASPU **£3.3**
18% Users w/problems	**9%** Users w/trust impacted	**+ 1** NPS score

DIGITAL PAYMENTS



VOUCEHRS

2019-2020

SPEND £1.5 million	USERS 0.3 million	ASPU £4.4
10% Users w/problems	4% Users w/trust impacted	- 20 NPS score

VIRTUAL GIFTS

2019-2020

SPEND £1.0 million	USERS 1.3 million	ASPU £0.7
19% Users w/problems	10% Users w/trust impacted	- 11 NPS score

GIFT CARDS

2019-2020

SPEND £0.6 million	USERS 0.5 million	ASPU £1.2
9% Users w/problems	5% Users w/trust impacted	- 14 NPS score

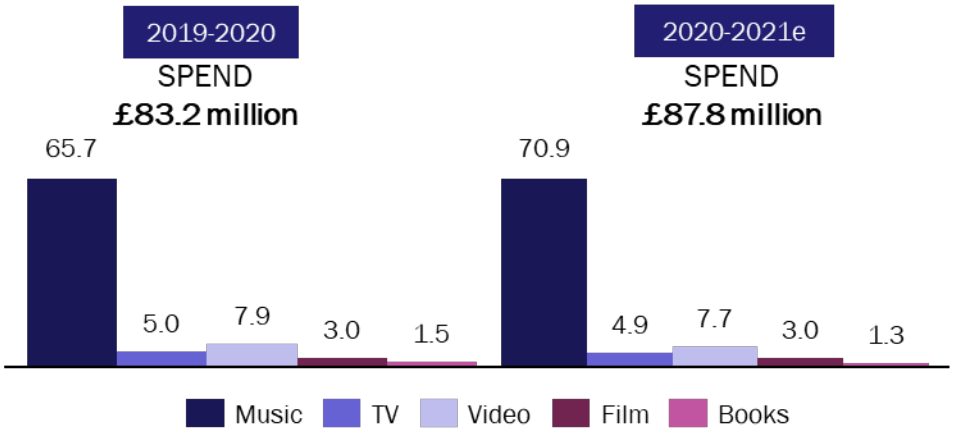
LOW COST INTERNATIONAL CALLS

2019-2020

SPEND £8.4 million	USERS 0.8 million	ASPU £10.3
25% Users w/problems	14% Users w/trust impacted	- 23 NPS score

ENTERTAINMENT

SERVICE CATEGORY



MUSIC

2019-2020

SPEND £65.7 million	USERS 1.6 million	ASPU £41.0
11% Users w/problems	3% Users w/trust impacted	+ 13 NPS score

TV

2019-2020

SPEND £5.0 million	USERS 1.0 million	ASPU £5.2
20% Users w/problems	10% Users w/trust impacted	+ 5 NPS score

VIDEO

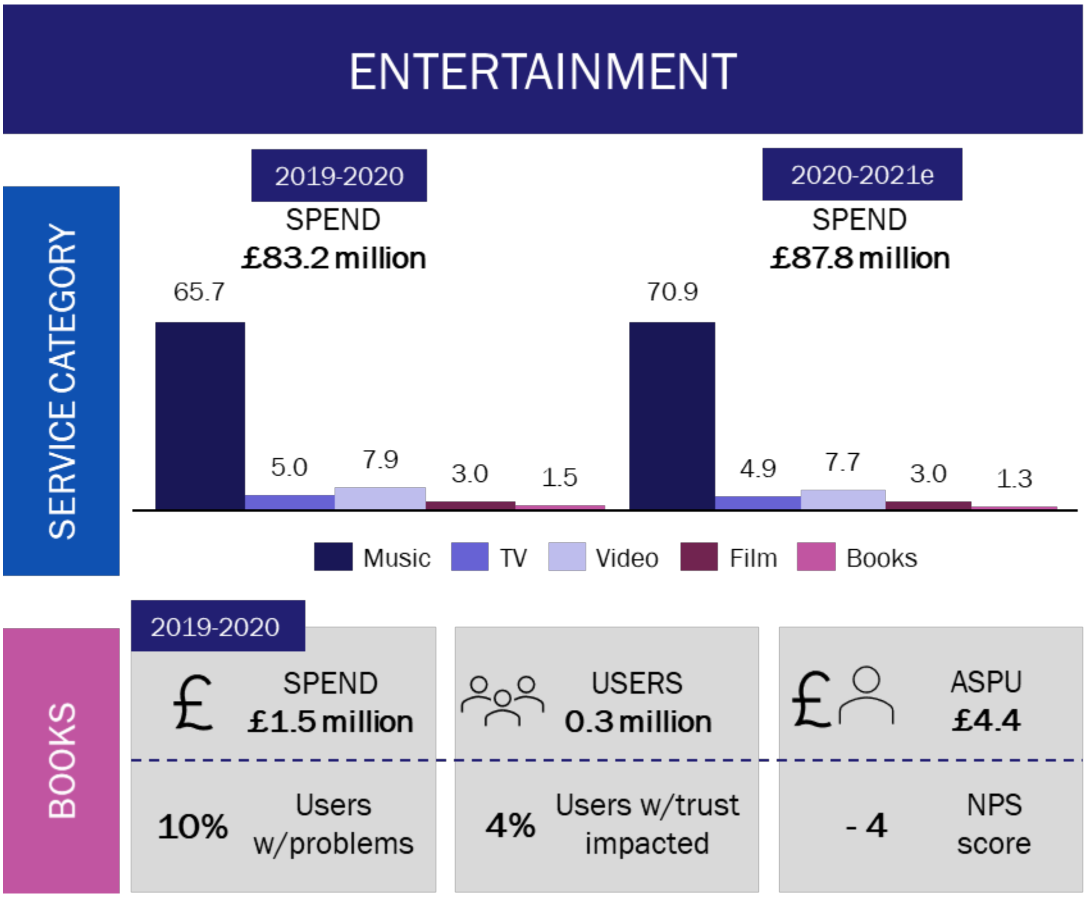
2019-2020

SPEND £7.9 million	USERS 1.9 million	ASPU £4.3
13% Users w/problems	5% Users w/trust impacted	- 8 NPS score

FILM

2019-2020

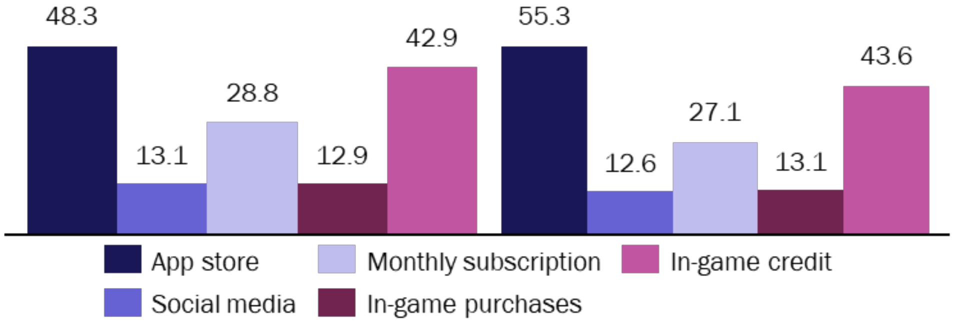
SPEND £3.0 million	USERS 1.1 million	ASPU £2.6
18% Users w/problems	8% Users w/trust impacted	+8 NPS score


ENTERTAINMENT
SERVICE CATEGORY
2019-2020
SPEND
£83.2 million
65.7
5.0
7.9
3.0
1.5
2020-2021e
SPEND
£87.8 million
70.9
4.9
7.7
3.0
1.3
Music
TV
Video
Film
Books
BOOKS
2019-2020
SPEND
£1.5 million
USERS
0.3 million
ASPU
£4.4
10%
Users w/problems
4%
Users w/trust impacted
- 4
NPS score

GAMES

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£146.0 million**	SPEND **£151.7 million**



GAMES FROM APP STORE

2019-2020

SPEND **£48.3 million**	USERS **7.3 million**	ASPU **£6.6**
11% Users w/problems	**4%** Users w/trust impacted	**- 26** NPS score

PLAYED ON SOCIAL MEDIA

2019-2020

SPEND **£13.1 million**	USERS **4.3 million**	ASPU **£3.0**
15% Users w/problems	**7%** Users w/trust impacted	**- 22** NPS score

GAMES BUNDLED AS PART OF MONTHLY SUBSCRIPTION

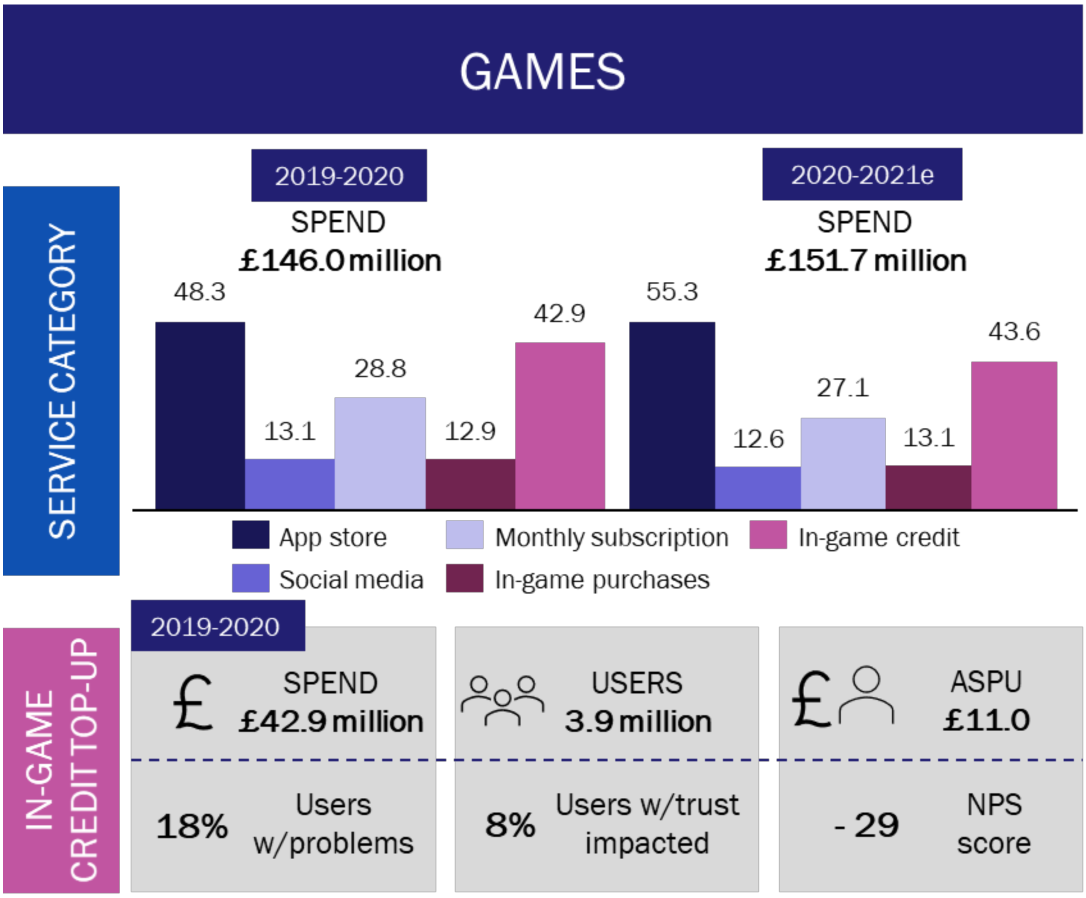
2019-2020

SPEND **£28.8 million**	USERS **0.9 million**	ASPU **£32.0**
22% Users w/problems	**11%** Users w/trust impacted	**- 24** NPS score

IN-GAME PURCHASES

2019-2020

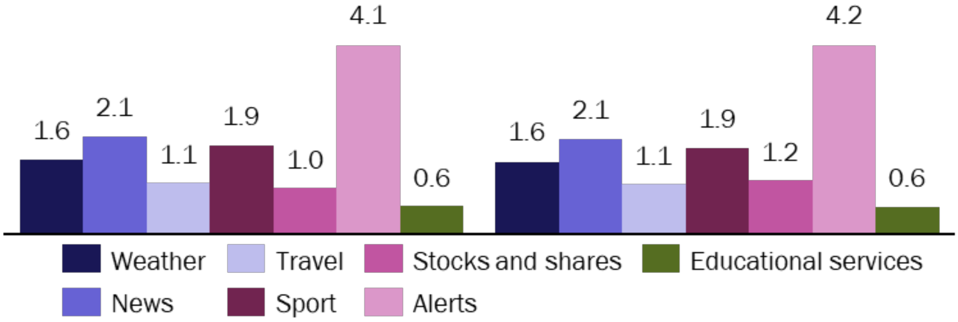
SPEND **£12.9 million**	USERS **3.7 million**	ASPU **£3.5**
19% Users w/problems	**8%** Users w/trust impacted	**- 33** NPS score


GAMES
SERVICE CATEGORY
2019-2020
SPEND
£146.0 million
48.3
13.1
28.8
12.9
42.9
2020-2021e
SPEND
£151.7 million
55.3
12.6
27.1
13.1
43.6
App store
Social media
Monthly subscription
In-game purchases
In-game credit
IN-GAME CREDIT TOP-UP
2019-2020
SPEND
£42.9 million
USERS
3.9 million
ASPU
£11.0
18%
Users w/problems
8%
Users w/trust impacted
-29
NPS score

INFORMATION, NEWS & EDUCATION

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£12.5 million**	SPEND **£12.7 million**



WEATHER

2019-2020

SPEND **£1.6 million**	USERS **0.3 million**	ASPU **£4.7**
6% Users w/problems	**3%** Users w/trust impacted	**- 22** NPS score

NEWS

2019-2020

SPEND **£2.1 million**	USERS **0.3 million**	ASPU **£6.2**
5% Users w/problems	**2%** Users w/trust impacted	**- 19** NPS score

TRAVEL

2019-2020

SPEND **£1.1 million**	USERS **0.2 million**	ASPU **£4.6**
9% Users w/problems	**3%** Users w/trust impacted	**- 16** NPS score

SPORT

2019-2020

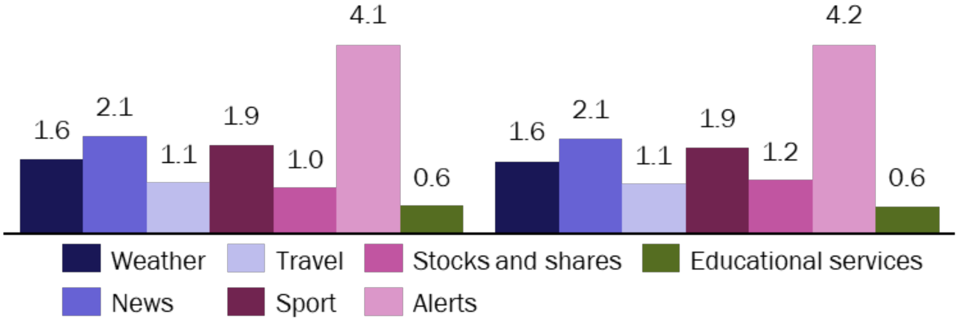
SPEND **£1.9 million**	USERS **0.2 million**	ASPU **£8.4**
9% Users w/problems	**4%** Users w/trust impacted	**- 12** NPS score

INFORMATION, NEWS & EDUCATION

SERVICE CATEGORY

2019-2020
SPEND
£12.5 million

2020-2021e
SPEND
£12.7 million



STOCKS & SHARES

2019-2020

SPEND **£1.0 million**	USERS **0.1 million**	ASPU **£14.6**
15% Users w/problems	**8%** Users w/trust impacted	**- 7** NPS score

ALERTS

2019-2020

SPEND **£4.1 million**	USERS **0.6 million**	ASPU **£7.2**
8% Users w/problems	**4%** Users w/trust impacted	**- 27** NPS score

EDUCATIONAL SERVICES

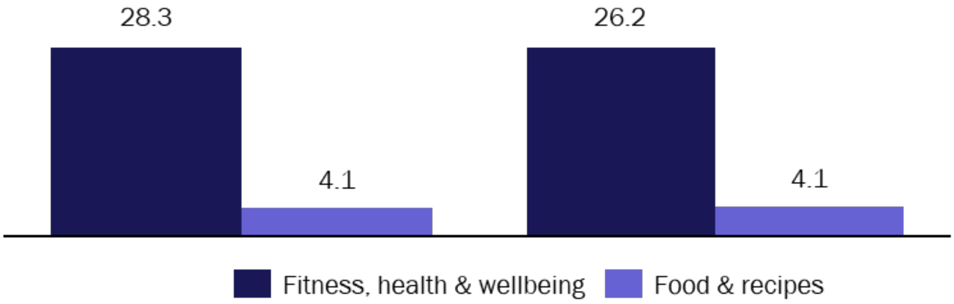
2019-2020

SPEND **£0.6 million**	USERS **0.1 million**	ASPU **£5.5**
15% Users w/problems	**6%** Users w/trust impacted	**- 8** NPS score

LIFESTYLE

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£32.4 million**	SPEND **£30.2 million**



FITNESS, HEALTH & WELLBEING

2019-2020

SPEND **£28.3 million**	USERS **0.8 million**	ASPU **£37.6**
15% Users w/problems	**6%** Users w/trust impacted	**- 6** NPS score

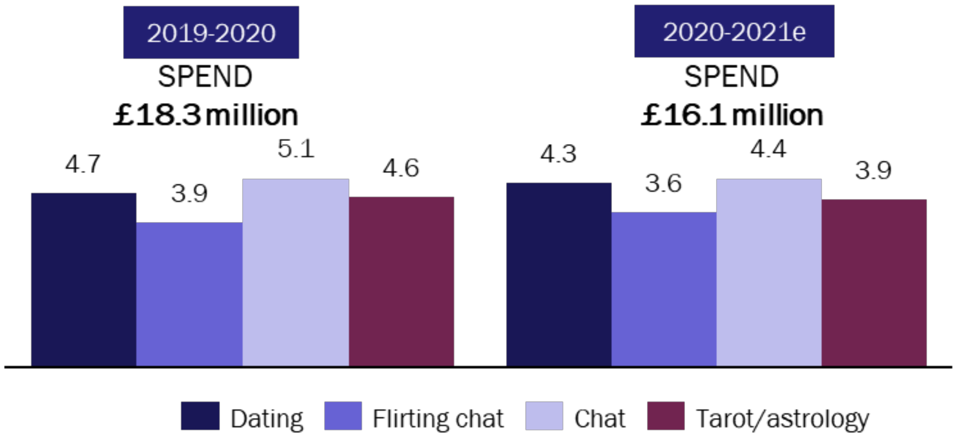
FOOD & RECIPES

2019-2020

SPEND **£4.1 million**	USERS **0.6 million**	ASPU **£7.1**
12% Users w/problems	**6%** Users w/trust impacted	**- 18** NPS score

PERSONAL & RELATIONSHIP SERVICES

SERVICE CATEGORY



DATING

2019-2020

SPEND	USERS	ASPU
£4.7 million	0.5 million	£9.3
20% Users w/problems	11% Users w/trust impacted	- 30 NPS score

FLIRTING CHAT SERVICES

2019-2020

SPEND	USERS	ASPU
£3.9 million	0.4 million	£11.1
28% Users w/problems	12% Users w/trust impacted	- 21 NPS score

CHAT SERVICES

2019-2020

SPEND	USERS	ASPU
£5.1 million	0.6 million	£8.2
29% Users w/problems	15% Users w/trust impacted	- 16 NPS score

TAROT/ ASTROLOGY

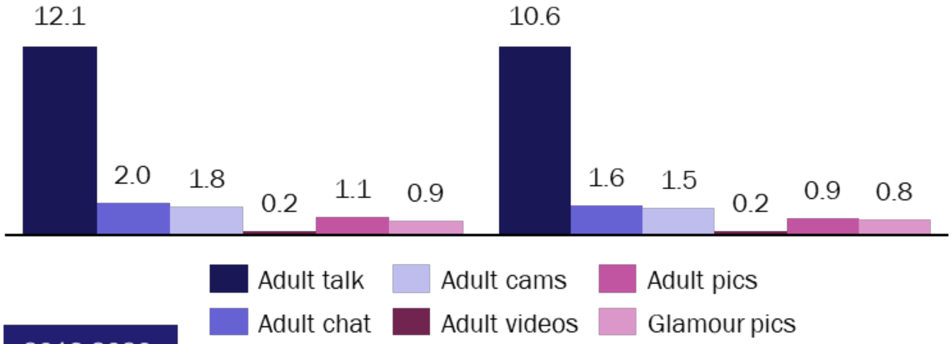
2019-2020

SPEND	USERS	ASPU
£4.6 million	0.2 million	£21.7
22% Users w/problems	10% Users w/trust impacted	- 25 NPS score

SEXUAL ENTERTAINMENT

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£18.1 million**	SPEND **£15.6 million**



ADULT TALK SERVICES

2019-2020

SPEND **£12.1 million**	USERS **0.4 million**	ASPU **£29.3**
34% Users w/problems	**17%** Users w/trust impacted	**- 5** NPS score

ADULT CHAT (MESSAGING)

2019-2020

SPEND **£2.0 million**	USERS **0.4 million**	ASPU **£5.3**
32% Users w/problems	**14%** Users w/trust impacted	**- 17** NPS score

ADULT CAMS

2019-2020

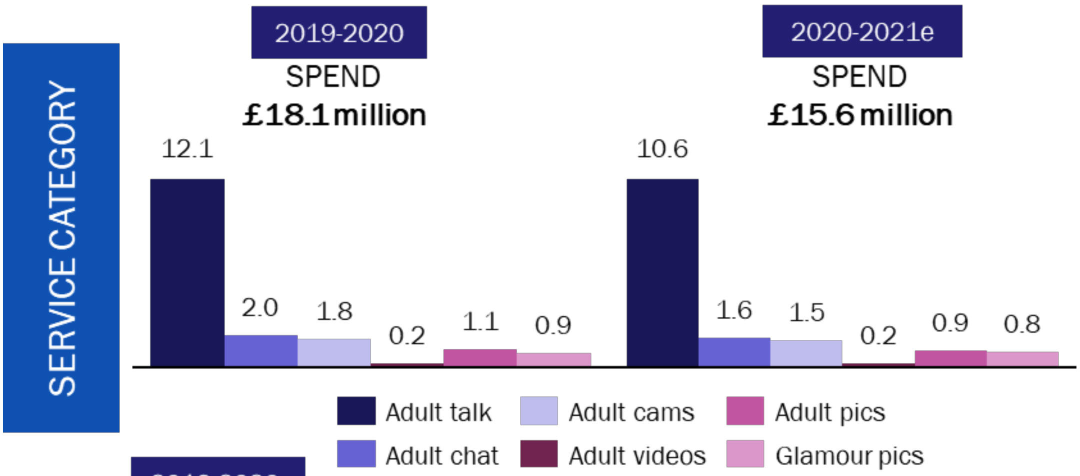
SPEND **£1.8 million**	USERS **0.4 million**	ASPU **£4.0**
25% Users w/problems	**12%** Users w/trust impacted	**+ 7** NPS score

ADULT VIDEOS

2019-2020

SPEND **£0.2 million**	USERS **<0.1 million**	ASPU **£27.5**
17% Users w/problems	**6%** Users w/trust impacted	**- 23** NPS score

SEXUAL ENTERTAINMENT



ADULT PICS

2019-2020

SPEND **£1.1 million**	USERS **0.6 million**	ASPU **£1.7**
24% Users w/problems	**12%** Users w/trust impacted	**- 13** NPS score

GLAMOUR PICS

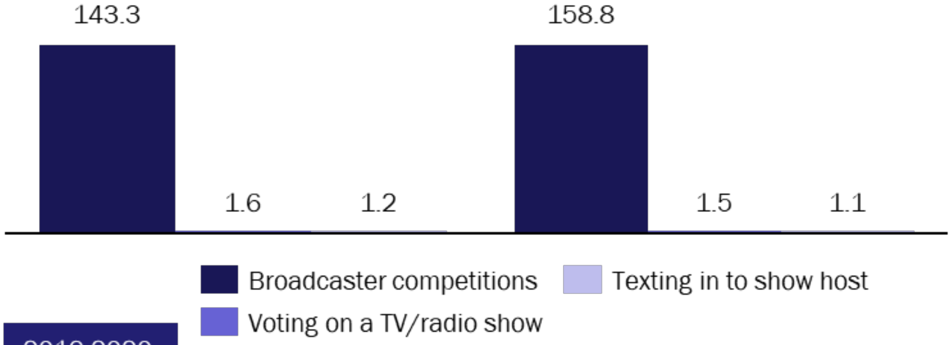
2019-2020

SPEND **£0.9 million**	USERS **0.6 million**	ASPU **£1.4**
21% Users w/problems	**12%** Users w/trust impacted	**- 25** NPS score

TV & RADIO ENGAGEMENT

SERVICE CATEGORY

2019-2020	2020-2021e
SPEND **£146.1 million**	SPEND **£161.5 million**



BROADCASTER COMPETITIONS

2019-2020

SPEND **£143.3 million**	USERS **11.3 million**	ASPU **£12.7**
14% Users w/problems	**7%** Users w/trust impacted	**-39** NPS score

VOTING ON A TV/RADIO SHOW

2019-2020

SPEND **£1.6 million**	USERS **1.3 million**	ASPU **£1.2**
16% Users w/problems	**6%** Users w/trust impacted	**-39** NPS score

TEXTING IN TO SHOW HOST

2019-2020

SPEND **£1.2 million**	USERS **1.0 million**	ASPU **£1.2**
22% Users w/problems	**10%** Users w/trust impacted	**-28** NPS score

Annex B Market sizing methodology

Our approach to estimating the end-user spend on phone-paid services in 2019–2020 and until 2022–2023 was based on the following four-step process.[37]

- 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 2019–2020, which has been broken down by spending channel. Consumer spend on charity donations does not generate revenue for network operators and is therefore not reported in their network returns. However, since 2017–2018, network operators have reported the total value of charity donations that has passed through their networks to the Phone-paid Services Authority.

Several additional steps have been taken to further break down the end-user spend across spending channels by service category (13 categories) and service type (47 types) and to forecast the evolution of the market up to 2022–2023 over the next 3 years These steps are detailed below.

B.2 Step 2: online consumer survey

A consumer survey was conducted to generate quantitative data on the adoption of phone-paid services, reasons for use/non-use of phone-paid services and the key underlying factors affecting usage and overall satisfaction. The survey was conducted online by Luc.id between March and June 2020. The survey included 26 questions overall and took approximately 15 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 was 9601 individuals and was broadly representative of the UK population aged 16 years and above, by gender and age.[38] Figure B.1 and Figure B.2 provide a comparison of the distribution by age group and gender of the UK population and the 9601 individuals surveyed.

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

38 Office of National Statistics (28 June 2018), *Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid*-2017. Available at:

Figure B.1: Distribution by age group of the population and of survey respondents, UK, 2019–2020

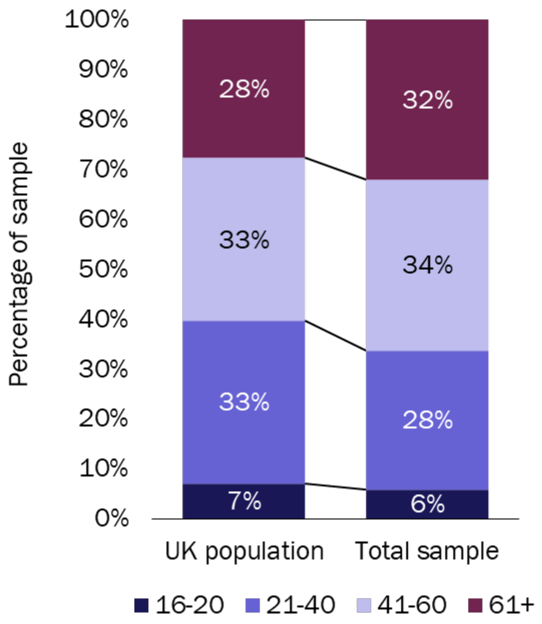
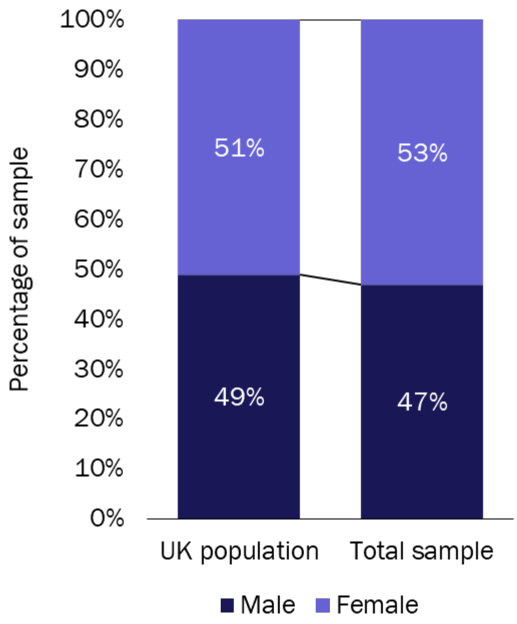


Figure B.2: Distribution by gender of the population and of survey respondents, UK, 2019–2020



Sources: Analysys Mason, Office for National Statistics, 2020

Out of the 9601 individuals surveyed, 5000 used at least one phone-paid service in the past 12 months (equivalent to a 52% 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 below.

Figure B.3: Demographic segmentation of phone-paid services users, UK, 2019–2020

Age group	Gender	Region	Household	Employment	Household income
8% 16–20	53% Female	34% England (South)	43% Couples with children	46% Full-time employed	26% < £20k
20% 21–30	47% Male	25% England (North)	27% Couples without children	15% Part-time employed	20% £20k–29k
17% 31–40		25% England (Midlands)	17% Alone	7% Self-employed	27% £30k–49k

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2017#uk-population-reaches-66-million.

Age group	Gender	Region	Household	Employment	Household income
21% 41–50		8% (Scotland)	6% Single parent with child	15% Retired	18% £50k–99k
14% 51–60		5% Wales	5% House share	6% Student	4% £100k+
21% 61+		2% Northern Ireland		12% Unemployed	5% 'I don't know'

Sources: Analysys Mason, 2020

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

In-depth interviews were conducted between February and July 2020 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. The objectives of these interviews were as follows:

- 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 impacting 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 2020–2021, 2021–2022 and 2022–2023.

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 number of interviews completed, by type of industry participant.

Figure B.4: Number of interviews completed, by type of industry participant, UK, February 2020–July 2020

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

Source: Analysys Mason, 2020

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 across spending channels, by service category and type.

- Firstly, we used the output of the consumer survey (Step 2) to generate initial assumptions about key spend drivers (including service adoption, frequency of usage and spend level) and to estimate draft distribution of end-user spend by service category and type (referred to as a 'bottom-up' approach).
- Secondly, we leveraged 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).
- Finally, both approaches were 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 2020–2021, 2021–2022 and 2022–2023. 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), as well as additional information collected from desk research on likely upcoming market developments.
- The final output of the market modelling exercise is an estimate of end-user spend (excluding VAT) on phone-paid services, split by service category (13 categories), service type (47 types) and spending channel (7 spending channels), for the periods between 2019–2020, 2020–2021, 2021–2022 and 2022–2023.