

# Transformation of Consumption of Information Content on Different Media Platforms in the UK in the 19–21th Centuries

Eshkerat A.M.

Department of Journalism  
I.N. Ulianov Chuvash State University  
Cheboksary, Chuvash Republic  
eshkeratamin@gmail.com

Danilov A.A.

Department of Journalism  
I.N. Ulianov Chuvash State University  
Cheboksary, Chuvash Republic  
danilov.andrey@mail.ru

Danilov A.P.

Department of Journalism  
I.N. Ulianov Chuvash State University  
Cheboksary, Chuvash Republic  
anatoliy.p.danilov@gmail.com

Danilova M.G.

Department of Journalism  
I.N. Ulianov Chuvash State University  
Cheboksary, Chuvash Republic  
danilova1956@gmail.com

Levushin A.N.

Department of Foreign Languages No. 2  
I.N. Ulianov Chuvash State University,  
Cheboksary, Chuvash Republic  
yamabushi585@gmail.com

**Abstract**—The paper presents the history of transformation of information consumption by the British audience since the beginning of the 20th century and the changes in the consumption of news transmitted by various media over the past ten years. The authors used the latest reports related to studies of audience and mass media by influential organizations, such as: communications regulator Ofcom, the Broadcasters' Audience Research Board (BARB), National Readers Survey (NRS), the Audit Bureau of Circulations (ABC) and the organization that make Internet audience measurement (comScore). The authors come to the conclusion about major changes over the past ten years caused by transformation in the behavior and preferences of news consumers, particularly among younger age groups, under technological innovations. The consumer now has access to a variety of information sources, often free of charge, which generally undermines the economic basis of the media industry.

**Keywords**—*transformation, informational content, Great Britain, audience, media.*

## I. INTRODUCTION

The study of the readership in the UK has a long tradition dating back to the end of the 19th and the beginning of the 20th centuries, when pioneers of intermediary companies appeared to sell advertisements to the mass media, which focused on the typology of English mass media: quality journalism addresses political and economic elites, mass media quality is oriented towards the middle class, and mass media address the working class.

Great Britain has always differed from other civilized countries in the rigid division of society into classes. Today, many residents of the country consider the class system of society one of the indispensable components of the British life, along with the traditions of tea drinking and small talks about the weather. For the English class distinctions do not wither away, they simply transform [1]. During the 20th century, the structure of the class system changed dramatically: instead of the division into representatives of the higher, middle and working classes used in the first half of the last century, new principles of division into social classes appeared.

## II. RESULTS AND DISCUSSION

In the second half of the 20th century, the scientific and technological revolution, and political and economic reforms caused deformation of the labor market, and new subclasses or social classes appeared. The system of social classes radically changed during the Thatcher rule, when both the middle and the poor classes changed. Closure of most jobs in industrial production led to emergence of a new "lower class" (lower than the traditional working class). The "new lower class" unites the unemployed who rely on state benefits.

At the beginning of the 21st century, social mobility increased under the impact of new information and communication technologies [2]. Therefore, based on the change in the composition of British society and the readership that depends on its relationship to a particular social group, the

British Institute of Practitioners in Advertising developed the following classification of readership:

1. Group A – the aristocratic and business elite, the upper middle class – the big bourgeoisie and highly paid intellectual society;
2. Group B – middle class – middle-ranking officials, bourgeoisie and highly skilled workers;
3. Group C-1 – lower middle class – petty bourgeoisie, professional intellectuals and employees;
4. Group C-2 – skilled workers;
5. Group D – low-skilled categories of the working class;
6. Group E – people living on scholarships or benefits from the state – students, retirees, the unemployed, etc.

Advertisers, when determining the publication's rating and the target audience of the advertisement published, divide the above-mentioned six categories of readers into two subgroups: ABC-1 and C-2DE. This largely corresponds to the social, cultural and economic position of readers in society [3]. The ABC-1 category includes readers of high-quality publications that belong either to the elite or to the upper middle class, which implies the reader's income and the high price of the advertised product in these publications. It is dominated by "prestigious advertising" – advertising of luxury goods, real estate, travel, announcements of large companies and financial institutions. Category C-2DE refers to representatives of the lower middle class, the working class and the poorest segments of society. Popular mass media is typically focused on these types of readers. The reader from this group is poorer, so it is natural that the focus is on advertising of consumer goods and various consumer goods.

At the end of 2016, Ofcom conducted an extensive survey research into the level of consumption of news on television, radio, print and online media throughout the UK. Various news channels, attitudes to individual news sources, local news, and information consumption and attitudes to these on different platforms were studied.

The Broadcasters' Audience Research Board (BARB) uses counters connected to working televisions in 5,300 UK homes, and tracks television viewing among all TV viewers above 4 years. The National Readers Survey (NRS) annually conducts a continuous quantitative survey using personal interviews. The survey covers 28,000 respondents across the UK (except Northern Ireland). The Audit Bureau of the Circulations (ABC) publishes verified numbers of the circulation of all British newspapers based on sales. ComScore establishes and regulates the British standard for the online industry and uses an integrated approach to measuring the audience on the Internet for mobile devices and pads.

Over the past ten years, the UK media has undergone major changes. The progress of new digital technologies contributed to the formation of innovative communication services that expand the potential of traditional television broadcasting. In

conditions of high-speed Internet, the phenomenon of non-linear television viewing has spread, when the viewer has different options for viewing and can choose programs on the computer, pad or smartphone. BARB is currently the only organization in the country that explores interaction of online TV viewing on PCs, pads and smartphones across all online platforms such as ALL 4, BBC iPlayer, ITV Hub, MAY 5, SKY GO and UKTV Play.

The above services have begun to emerge since 2006. These applications provide British audiences and viewers with audio and video on demand. Services are available on a wide range of devices, including personal computers, pads, smart TVs and mobile phones. The content on demand includes the latest news, sports news, movies and TV shows. The content is available for viewing for a limited period of time and is protected by digital rights management software provided by Microsoft and NDS Group, and therefore cannot be copied to disk or viewed after the date specified in its license. These services differ since the BBC iPlayer, in contrast to the others, does not broadcast advertising. Some services conducted rebranding. For example, on October 17, 2018, the BBC iPlayer Radio brand was renamed to BBC Sounds. On March 1, 2019 ALL 4 was renamed with a new logo, site design and application design. Rebranding included a trial version called All 4+ for registered users to pay and to remove ads from their shows on laptops and PCs. If the test is considered successful, it can permanently function in the future. These innovative steps made Channel 4 the UK's largest commercial on-demand video broadcaster during this period [4].

The main competitor of ALL 4 is BBC iPlayer. Before launching in December 2007, BBC expected the service to cover half a million users in the first six months. However, the success of the new service exceeded expectations, and in the first three weeks, 3.5 million programs were transmitted or downloaded. During 2008, the growth continued at an impressive pace. By April, iPlayer accounted for about five percent of all Internet traffic in the UK, and by June there were about five million page views per day. In December, it was announced that, more than 180 million programs had been viewed on iPlayer since its release. As a result, iPlayer was awarded the Interactive Innovation Service in May 2008, and left behind the Big Art Mob of channel 4. In October 2009, 70 million requests were made on the site and seven petabytes of data were transmitted. Television formed about two thirds of all requests, and the rest amount was formed by the radio. Most television programs were pre-recorded, while radio preferred live broadcasting. Eighty-five percent of requests came from computers, and most of the rest of the requests came from iPod, iPhone, and PS3 (about 15 platforms in total). Top Gear was the most popular television program in 2009, and The Ashes was the most popular radio program. IPlayer requirements caused concern and criticism of the UK Internet service providers since the service needed additional bandwidth. Several Internet providers, in particular Tiscali, suggested BBC to partially fund network upgrades to cope with iPlayer traffic. BBC responded

that iPlayer was driving the demand for broadband subscriptions [5].

BARB generates data for watching online TV with the software code that was added to 40 different online platforms. Software embedded in the TVPlayer app allows operators to detail what was watched and how long it lasted in real time or on demand. Kantar Media uses monitoring software counters to collect this data for BARB to publish data on the number of PCs, pads and smartphones used to watch programs both on demand and live. The data reported by TVPlayer can be viewed in several ways by comparing the total viewing time or streaming through a TVPlayer/channel or group of broadcasters, studying changes in viewing levels over time, or identifying the ranking of the best programs on all platforms.

Since 2013, BARB has been measuring real-time watching of commercials, and it introduced another function that shows the age profile of viewers watching TVPlayer apps in real time in 2017. These innovative approaches changed the practice of advertising broadcasting: now there is dynamic advertising, when one advertisement in the TV program can be changed to another one to replace the advertisement that is watched by linear TV viewers with advertisement for target audience. This apparently enhances the effectiveness of the impact on the audience. The advertiser selects the target audience for his dynamic advertising based on such factors as location, demography and lifestyle. In the era of multichannel television and a wealth of sites and applications, the concept of audience coverage becomes irrelevant. The viewing time, when the viewer often switches from one program/site to another, becomes more important.

Television remains currently the core platform for news (used by 69% of adults) followed by the Internet (48% of adults). However, there are a number of differences in age and demographic groups: 50% of people between the ages of 16 and 24 use television to get news. For people aged 65 years and older, this figure is 90% [6].

The younger age group from 16 to 24 years spent 23 hours on viewing the news in 2016, compared with 33 hours in 2015. The older age group aged 65 years and older spent 215 hours in 2016, this figure has not changed since 2010. Most of the news is watched on BBC 1. The socio-economic category ABC-1 more often watches numerous public and commercial broadcasters. Category C-2DE is more likely to watch the commercial channel ITV. Black people and ethnic minorities are more likely to watch BBC.

It is important that television is the most popular platform to get local news. 43% of news users say they watch regional and local broadcasts on BBC 1, and 31% do it on ITV. BBC 1 is most popular in Wales, where almost six out of ten (57%) prefer BBC 1 as the main source of local news, compared with 51% in England, 50% in Northern Ireland and 41% in Scotland. ITV is the second most popular source of local news in all regions of the UK: 47% in Northern Ireland, 31% in Scotland, 29% in England and 28% in Wales.

A third of British adults (33%) say they mostly receive news on the radio, and this figure has remained stable in recent years. More than half (55%) of those who use radio prefer the BBC radio, while a quarter of respondents (26%) use only commercial radio stations.

Most people over 65 are likely to use newspapers and radio to get news, and only 18% use the Internet. The younger age group, on the contrary, uses the Internet more often to receive news (63%) [7].

It should be noted that studies show differences in the level of news consumption among representatives of different classes: Category ABC-1 more often uses newspapers, radio and the Internet. Category C-2DE commonly uses television. Among this category, only 6% use all four main platforms to receive news, and 29% use a mobile phone.

According to Roy Greenslad, the cumulative daily circulation of UK national newspapers has declined since 2010 from 9.2 million in 2010 to 6 million copies in 2016. According to NRS, The Sun and Daily Mail are the most widely read newspapers in the UK. Newspaper readability on the Internet significantly increases overall consumption. Today in the UK, there are only two newspapers, where the number of readers of paper-based versions is greater than the number of readers of digital versions on the Internet. This concerns The Times/Sunday Times and Metro. Among 29% of population who receive news through newspapers, almost every fourth (26%) reads the Daily Mail headings, and every fifth (22%) turns to The Sun headlines. 11% considers the news headlines in Daily Mirror, and 9% each read The Times, Metro and The Guardian news blocks [8].

Only 17% of all readers get news in the regional press, that is every sixth, while every seventh (15%) claims that he uses social networks to get local news [9].

Almost half (48%) of adults currently use the Internet to get news. It should be mentioned that in 2013 only a third of adults (32%) got news on the net. Worldwide Internet audience has grown by 50 percent. Of these, 23% refer to websites and applications of television broadcasters, 20% refer to social networks, 17% refer to search systems, and 15% surf newspaper sites and digital applications of newspapers.

It should be noted that ABC-1 representatives are more likely to turn to applications and information websites compared to C-2DE representatives (30% vs. 10%). This means that ABC-1 representatives have access to most information sources.

In the case of specific news sources, 56% of online readers claim that they surf the BBC website, which is twice as many as those who refer to the second most popular Facebook website (27%).

The audience of social networks is increasing rapidly. In 2015, 30% of Internet users received news through messages on social networks, whereas in 2016, the amount of those who got news on social networks attained 47%. When analyzing the

types of news viewed, it was found that the posts in social networks are the main sources of the most popular type of news received by Internet users – "broken" news commented by bloggers or ordinary users and friends. This type occupies the leading position since 60% of Internet audience actively refers to them. The second and third places are taken by UK news and local news, respectively, which are popular among every second user. International news and celebrity news are called for every third person searching for news [10].

Viewers, listeners and readers of news on different platforms impose similar requirements for the quality, accuracy and reliability of news broadcasters. Impartiality of news is critical to 90% of TV viewers, 84% of radio listeners, and 80% of newspaper readers. Users of new media have less stringent requirements for impartiality: only 70% of respondents referring to broadcaster's websites consider this fact important compared to 66% of newspaper sites users. More than a half of respondents (52%) consider it really important that social networks be impartial.

Recent studies of the dynamics of the newspaper market in the UK conducted in April 2018 and covering the period from 2007 to 2017 showed that the circulation of national newspapers in the UK in 2007 was 11.2 million copies, and in 2017 it amounted to 6.1 million copies; hence, revenue fell from 4.6 billion to 1.4 billion pounds. This indicates a 2-fold decrease in circulation and a 3-fold decrease in revenue. The percentage of adults in the UK who consider newspapers the main source of information decreased 3-fold from 27% to 9%. At the same time, the percentage of adults using the Internet as the main source of information increased 9-fold from 4% to 37% [11].

With the advent of new generations of voice assistants such as Siri, Cortana, Amazon Echo, Bixby and Google Assistant, human-computer interaction based on advanced human speech recognition and language processing technologies has grown. Recent advances in artificial intelligence enabled development of the services that allow people to interact with their devices that generate natural speech. One of the first large-scale platforms that offered speech-generating devices was Apple's Siri integrated into smartphones in 2011. In addition to smartphones and pads, voice-activated control was introduced into smart TVs and the latest car models. In 2014, Amazon Echo released a new generation of "smart assistants" combining audio and visual functions and distributed them in the United States, in 2016 they were launched in the UK. Other equipment manufacturers such as Google Home and Google Assistant showed their innovations in April 2017, and Apple Home Pod together with Siri launched new smart devices in February 2018. Despite the increased number of manufacturers of smart devices, the Amazon range remains the most popular and accounts for 75% of the British market. Although the coverage of these smart devices is insignificant, its popularity is growing among the younger generation.

Smart gadgets connect to the Internet and perform voice-activated control functions. The built-in voice assistant of artificial intelligence responds the commands and questions of

the user through smart speakers. This allows the user to give commands to the gadget to turn on the music, to report the weather forecast, to set the alarm, and to search for information on the Internet. Broadcasters immediately began to create new services based on new technologies for their listeners and viewers. Statistics show that live radio accounts for over half (54%) of audio listening through smart gadgets. Smart gadgets are used for a wide range of functions: 92% of respondents claim that they use smart gadgets to get news and weather forecast, and 88% of respondents use them to get answers to common questions. New services respond the questions to know which song is playing and which show is on.

Some UK broadcasters, including Global, released new applications for their radio stations, while other commercial broadcasters developed applications for various Amazon platforms to provide access to several hundreds of British radio stations. In December 2017, the BBC Corporation launched its first full-featured smart voice application that allows users to access the full range of BBC radio stations, including all local, national and international stations, and a full range of BBC podcasts.

Radio broadcasters transmitted through smart speakers can broadcast commercials and sponsorship messages similar to those broadcasted on other platforms, such as DAB and FM. However, audio transmission via IP provides the opportunity to use personalized and addressable ads that are dynamically inserted into the audio stream. The "smart speaker" function based on the question-answer model simulates a medium for search advertising – the market that was not previously available to the radio industry. In addition to the access to audio content and applications such as search, some smart speaker owners use their devices for online shopping.

The latest innovations in the field of broadcasting include podcasts. Although there is no established definition of this term, podcasts can be referred to as episodic music or speech content that can be downloaded or transmitted upon request. Although the term was used back in 2004 to describe a new type of audio content, the "podcast" gained popularity only recently due to its documentary "works" that employ new techniques. The first work called *Serial* was released in 2014 and gained tremendous popularity around the world. Sarah Koenig, the author of the program *This American Life*, tells the story from the real life of Americans not artistically, but using dramatic structure and musical effects. Recently, the consumption of podcasts in the UK has grown, and the number of producers of similar content is growing. BBC is the main producer of podcasts worldwide. Last year there were around 240 million downloads of BBC podcasts.

Podcasts are mainly used to attract young audiences. According to the research conducted by Ofcom in 2018, British listeners get access to podcasts from various sources. The most frequently used ones were BBC websites or applications, iTunes, YouTube, streaming services and newspaper applications. In June 2018, BBC released the *Sounds*

application that combines radio content and podcasts to facilitate navigation and access for the audience.

Statistics show that the number of adults in the UK who listen to podcasts every week increased from 3.2 million (7% of adults) in 2013 to 5.9 million in 2018 (11% of adults). This increase is observed in all age groups, but the fastest growth was among 15–34 years old people and amounted to 23%. Despite the great coincidence of radio and podcast consumption, the podcast listener profile was different from that of the radio listener, even for those who listen online. Podcast listeners were more likely to be men (62%). Samples of podcasts change during the day, while the traditional radio listening scheme is as follows: the initial peak of listening occurs during breakfast, and then another rise is in the afternoon. The number of podcast listeners is relatively stable during the day, and it reaches its maximum in the afternoon when people listen to the radio on transport. It should be noted that adults allocate to audio programs three-quarters of the time spent on listening during the week; for weekly podcast listeners, this value drops to 48%. Among youth, the loss becomes even more obvious. Among 15–24 years old listeners, 36% of the time spent on listening during the week is allocated to live radio. However, among those who listen to podcasts every week, the share of live audio-time is reduced to 25% [12].

In addition to the unofficial podcasts produced and distributed by fans of television programs, podcasts are produced by broadcasters and production companies as an addition to television content. They are part of the broadcaster's strategy for marketing their programs. At present, the best podcasts, according to the iTunes podcast chart in the UK, were Love Island and The Morning After, commissioned by ITV to accompany the popular reality TV series ITV2. These daily podcasts and applications provide subscribers and viewers with a forum for daily communication by sending them a program notification, and provide sponsors with additional opportunities to reach their target audience.

Different ways of media consumption have split the audience for television broadcasters. In 2010, residents of the UK watched an average of 3 hours and 23 minutes of broadcast television per day. Since then, there has been a gradual decline in the adult watchers and a sharp decline in children and young people who watch television. Viewing of children decreased by 15% in 2017, on average up to 1 hour 24 minutes, and viewing of 16–24 years old watchers fell by 12%, on average up to 1 hour 40 minutes. Young people (from 16 to 24 years old) watch YouTube on average an hour a day. Due to this, YouTube and Netflix have become more recognizable brands than BBC and ITV among children aged 12–15 years. Increased fragmentation had different effects on viewing patterns, depending on the television genre. A show with mass appeal of more than 8 million people is now becoming increasingly difficult to create, especially in genres of soap and entertainment television. However, high-quality dramas and major sporting events continue to provide mass viewing for line television.

Internet consumption has faced transformations as well. Currently, 62% of the time spent on the Internet comes from smartphones. Women spend more time than men on smartphones, and in 2018, women of all age groups under 55 for the first time spent more time on the Internet than men.

There have been dramatic changes in the use of the Internet among various socio-economic groups, especially among low-income people. C2DE representatives use the Internet four times less frequently than ABC1 representatives.

American online giants – Google and Facebook – have expanded the UK audience, and now it accounts for 90% of users per month. Despite the fact that BBC was able to overtake Amazon, the corporation ranks only third in popularity among online players.

The dynamic of changing social networks shows the growing popularity of Facebook among older Britons, while young users prefer Snapchat and Instagram. These changes caused an increase in online advertising, which grew by 11.3% in 2017 and accounted for 11.6 billion pounds. It should be noted that for the first time in 2017, spending on digital advertising exceeded the cost of traditional advertising. This growth was due to mobility, which grew by 34% in 2017 and accounted for 45% of the cost for digital advertising.

Despite the growing trend, the Internet is not universally used in the UK. Older people and low-income people were not likely to use the Internet in 2018. Among all adults in the UK, two out of ten unemployed do not have access to the Internet. However, this is five percent less than in 2016, when 25% of the unemployed did not use the Internet. Among those over 65, two out of five did not use the Internet compared to 2% of people aged 16–24 years and 3% of those aged 25–34 years. Internet users aged 65 and younger claimed that high cost of the equipment was the main reason for not using the Internet more often than people over this age (19% vs. 5%). The rate of Web services rejection remained higher among adults from C2DE group (17%) than among those from ABC1 group (4%). Internet users aged 16–64 years among DE representatives spent less time on the Internet (2–3 hours). Internet users among DE representatives less often than those among non-DE representatives reported that they are "confident users of the Internet" (84% vs. 92%). DE representatives are less likely to have access to most Internet-connected devices, including smartphones, computers, pads, video recorders, smart TVs, streaming media players, etc.

### III. CONCLUSIONS

Over the past ten years, there have been considerable changes caused by transformations in the behavior and preferences of news consumers affected by technological innovations, especially among younger age groups. The consumer now has access to a wide variety of information sources, often free of charge, which undermines the economic basis for the television and radio industry, and even more so for the printing industry.

## References

- [1] D. Robson, "British class system: do not rush to bury it". [Electron Resource]. Available at: [https://www.bbc.com/russian/uk/2016/05/160504\\_vert\\_fut\\_does\\_social\\_class\\_matter\\_in\\_britain\\_today](https://www.bbc.com/russian/uk/2016/05/160504_vert_fut_does_social_class_matter_in_britain_today).
- [2] A.A. Danilov, "Evolution of information technology in the context of transformation of the conditions of social and cultural life of small nations of Russia", Bulletin of Chuvash University, No. 4, p. 94, 2012.
- [3] The Institute of Practitioners in Advertising. [Electron Resource]. Available at: <https://ipa.co.uk>.
- [4] Channel 4 relaunches All 4 with a new visual identity, new iOS app and a trial ad-free service. [Electron Resource]. Available at: <https://www.channel4.com/press/news/channel-4-relaunches-all-4-new-visual-identity-new-ios-app-and-trial-ad-free-service>.
- [5] BBC iPlayer. [Electron Resource]. Available at: [https://en.wikipedia.org/wiki/BBC\\_iPlayer/](https://en.wikipedia.org/wiki/BBC_iPlayer/)
- [6] BARB Viewing Report. [Electron Resource]. Available at: [https://www.barb.co.uk/download/?file=/wp-content/uploads/2018/04/Barb-Viewing-Report-2017\\_FINAL\\_LR-May-2018.pdf](https://www.barb.co.uk/download/?file=/wp-content/uploads/2018/04/Barb-Viewing-Report-2017_FINAL_LR-May-2018.pdf).
- [7] News consumption in the UK: 2016. [Electron Resource]. Available at: [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0016/103570/news-consumption-uk-2016.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0016/103570/news-consumption-uk-2016.pdf).
- [8] R. Greenslade, "Popular newspapers suffer greater circulation falls than qualities". [Electron Resource]. Available at: <https://www.theguardian.com/media/greenslade/2017/jan/19/popular-newspapers-suffer-greater-circulation-falls-than-qualities>.
- [9] UK national newspapers. [Electron Resource]. Available at: <http://www.magforum.com/papers/nationals.htm>.
- [10] Reuters Institute Digital News Report 2017. [Electron Resource]. Available at: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital%20News%20Report%202017%20web\\_0.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital%20News%20Report%202017%20web_0.pdf).
- [11] Mediatique. Overview of recent dynamics in the UK press market: Report For DCMS. April 2018. [Electron Resource]. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/720400/180621\\_Mediatique\\_-\\_Overview\\_of\\_recent\\_dynamics\\_in\\_the\\_UK\\_press\\_market\\_-\\_Report\\_for\\_DCMS.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/720400/180621_Mediatique_-_Overview_of_recent_dynamics_in_the_UK_press_market_-_Report_for_DCMS.pdf).
- [12] UK Communications Market Report 2018. [Electron Resource]. Available at: [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0022/117256/CMR-2018-narrative-report.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0022/117256/CMR-2018-narrative-report.pdf).