



Access to broadcast and on-demand content

Awareness, usage, perceptions and experiences

Research Report

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1. Executive Summary

Introduction to the research

This research study explores experiences and attitudes towards access services (subtitling, signing and audio description) and includes both a quantitative and qualitative component.

The overall aim of the quantitative research was to measure the awareness and usage of access services among the general UK population and a sub sample of people with sensory impairments, as well as satisfaction levels among users. The qualitative research sought to obtain an in-depth understanding of the overall experience amongst hearing/sight impaired users.

Overview of findings

Access services are extremely important to people with sensory impairments – enabling them to access and fully engage with media content.

Television is vital to participation and inclusion in social and cultural life, and people with sensory impairments have the same right to enjoy broadcast content as sighted and hearing people do. However, for many with hearing and/or visual impairments, that participation and enjoyment relies on programmes carrying subtitles, audio description, or signing.

When access services work well, they can have a strong positive impact - fostering feelings of inclusion, participation and value, and enabling users of access services to connect on a cultural and interpersonal level with others.

Participants within the qualitative study discuss how access services enable them to relax and enjoy television without relying on others to explain elements of the storyline, resulting in a sense of greater independence. Also, being able to keep up to date with news, current affairs, cultural and contemporary programmes allows users of access services to be able to share common experiences and contribute to conversations about popular trends and topics.

Access services also help people engage with educational content and build language skills.

Because access services are highly valued by users, when they are not available or less than satisfactory, feelings of marginalisation and isolation can be reinforced

Access services are very important to users and when they are unavailable, or found to be lacking in quality or consistency, it can reduce the enjoyment of media content and result in feelings of disappointment, frustration, detachment, isolation and marginalisation at home and in wider society.

Using access services is not always conducive to shared viewing and the need to use different tools to hearing and sighted people can reinforce some people's feelings of loss linked to the deterioration of their senses. Some participants also expressed concern that using access services can detract from others' enjoyment when they view television together. In addition, reading subtitles requires concentration and this can detract from viewing enjoyment, particularly for older people or those with dual impairments.

So, while access services are important to users, their use can have a negative impact on the overall viewing experience, especially when they are not of a consistently high quality.

Awareness and usage of access services could be significantly improved

Among the general UK population awareness of access services is low, with fewer than half (42%) of the sample claiming to have come across any access services while viewing films or programmes on television or through other devices. Whilst awareness levels are higher among those with hearing or visual impairments, awareness levels are far from universal with only 54% claiming to be aware of any service¹.

The quantitative data does however indicate higher awareness levels of access services among those with more severe impairments. For example, awareness of subtitles measures 53% among those with a mild impairment, rising to 70% among those with a severe impairment².

¹ Previous research, such as that conducted by Ipsos on behalf of Ofcom in 2006 (Provision of access services, 2006), found higher levels of awareness of access service. This may be in part due to questionnaire differences, with greater emphasis given to explaining the nature of specific access services in the 2006 research. However, it is also possible that public knowledge may have been suppressed in the intervening period, potentially as a result of the expansion of linear and non-linear television services, fewer access service specific awareness campaigns and reduced programme signposting.

² It should be noted that this data is indicative, as oppose to statistically significant given the small base sizes available at this level of breakdown.

Age is an influencing factor when it comes to awareness levels among those with hearing and visual impairments

Awareness of access services among those aged 65+ measures 48% and compares to 70% awareness levels among those with impairments aged 16-34. Given that the age profile of those with sight and hearing impairments skews older (the quantitative survey indicates 63% of people with hearing and/or visual impairments are aged 65+), the results indicate that awareness levels are lowest among those who are most likely to require them.

Levels of awareness of access services are significantly lower in Freeview only homes when compared to Pay TV households which is likely to be related to age as Freeview homes tend to have an older age profile.

Subtitles are the most prominent access service but use is far from universal

Subtitles are the most well-known service, reflecting their wider availability and longer history of use. Just under one in ten (8%) of the UK population claim to use any access service with subtitles being the most commonly used service (7%). Around three-in-ten (29%) of people with hearing impairments claim to use subtitles, rising to just under half (47%) among those with severe impairments.

However, there are still some issues with overall availability as some broadcast media is not subtitled.

Use of subtitles appears to be higher among those with hearing impairments in households that have pay TV and/or access to on demand services.

This may be related to a few factors including; ease of subtitle access on the services themselves; the increased technical know-how needed to access on demand services; and the lower age profile of pay TV and on demand households (with younger people having higher levels of access services usage in general).

Audio description is more likely to be used by those with a severe visual impairment

Usage of audio description (AD) services are low measuring 3% among the visually impaired, rising to 16% among those with a severe visual impairment. The qualitative research confirmed low levels

of usage among visually impaired people – and this is directly related to low availability. However, AD quality (or poor quality) is also cited as an inhibitor.

Usage of signing services is also low in the quantitative survey – to measure this accurately it would have been necessary to survey a sample of BSL users – which is outside the scope of this study.

There are high levels of satisfaction with the availability of subtitles on scheduled TV but there are issues with quality

The quantitative survey indicates reasonable levels of satisfaction regarding the availability of subtitles among those with impairments who are either aware of or are users of these services. Fifty percent of those aware of subtitles claimed to be satisfied with their availability, rising to 66% among users.

However, the data also indicates some level of ambivalence with 38% of those aware and 23% of users neither satisfied nor dissatisfied, while absolute levels of dissatisfaction were low (11% among those aware and among users).

Satisfaction with availability on Video on demand/ catch up TV services is lower, 38% of those aware saying they are satisfied against 46% of users.

Participants highlighted issues with the quality of subtitling and audio description

The qualitative research indicates several issues regarding the quality of the subtitles. Namely: subtitle accuracy in terms of not accurately reflecting the film or programme content, spelling accuracy, latency with the spoken word, speed, colour, location and size.

The qualitative research also indicates that users of audio description find the quality variable with issues around emphasising the wrong aspects, having too little detail, providing too much unnecessary detail, and being inaudible. Participants also claim that audio description suits certain programme genres more than others. For example, nature documentaries are said to have poorer quality audio description when compared with genres such as sport, which is considered to have better commentary through audio description.

The physical navigation required to use audio description services is also noted by some as a challenge. For example, remote controls do not have simple, consistent, labelling or buttons that are easy to use.

Access services can be difficult to find and navigate and inconsistent provision of access services across channels, content and service providers is a barrier to use

The qualitative research indicates that usage levels across all three types of access service is impeded by confusion around availability across the different channels, platforms and service providers. This often relates to inconsistencies in sign-posting of services/knowledge on how to access services. Simply finding access services enabled content is a challenge. There does not appear to be clarity or consistency on signposting within menus across Electronic Programme Guide (EPG) providers. Many participants rely on printed guides to plan what they view. These issues represent barriers to engagement.

The qualitative research participants who are more digitally confident and using BBC iPlayer, and Netflix, tend to have a better level of awareness and use of access services. However, more generally there is limited understanding of access service provision and user numbers appear limited.

The qualitative interviews highlight that core users tend to feel that access services are a low priority for platform and content providers. This perception is directly related to the difficulty of finding or navigating towards services, and misconceptions (usually amongst the less digitally confident) related to whether services such as catch up offered any access services at all. In addition, there are problems experienced with the quality of the services themselves and barriers faced when using them.

Users of access services deploy a range of coping mechanisms to compensate for low provision or poor quality of access services

Currently, participants compensate for low provision and quality of services by developing various coping mechanisms to browse and select content and can often 'make do' with less than satisfactory levels of engagement. Tactics range from simply selecting content from a limited choice of familiar content, to adjusting their behaviour or environment to using additional hardware.

Social support is also an important means of coping for some participants.

Final comments

The research highlights that there is much appetite for greater provision of access services across the broadcast landscape among those with sensory impairments. A broadening of availability, combined with better sign posting of provision would be welcomed.

The quality of access services also need to be improved, including customisation to meet different needs and modes of engagement. Increased provision, better sign posting and an improvement in quality, will allow for greater engagement with content, and help counter the sense of marginalisation felt by some people in the hearing and visually impaired community.

2. Research Design

2.1 Introduction

This research study explores experiences and attitudes towards 'access services' (subtitling, signing and audio description) across the general UK population, and includes a particular focus on the core group of interest - users with a hearing and/or visual impairment. This section will describe how and why research was carried out.

2.2 Aims

The overall aim of research was to measure the awareness and usage of access services, exploring views towards access service provision on linear and non-linear services. Non-linear services include those where the scheduling of the content is controlled by the consumer, such as a video on demand or catch up television services. Linear TV, otherwise known as traditional television, is broadcast according to a schedule and requires the viewer to watch the requisite programme and channel at the prescribed time.

Specific objectives of the research:

- To explore awareness and usage of access services.
- To gauge the overall satisfaction amongst users (hearing/sight impaired).
- To obtain an in-depth understanding of the overall experience amongst hearing/sight impaired users.

2.3 Methodology

There are three parts to the research - a phase of preliminary desk research to inform the subsequent quantitative and qualitative parts of the overall research programme.

2.3.1 Preliminary desk research

An initial phase of desk research identified other relevant work on access services, internationally and within the UK, to help inform this programme of research.

Existing research and published papers from specific, relevant, organisations³ were examined and a summary of the key learnings from this work is outlined in appendix 1.

This preliminary research helped to shape the research design (questionnaires and other research materials). It also outlined key issues to help contextualise findings, relating to:

- The use of access services among the core group of those with hearing/sight impairment.
- Current policy and availability of access services (referenced within relevant sections of this report).

2.3.2 Quantitative research

The quantitative research focused on measuring awareness and usage of access services, as well as evaluating overall satisfaction levels. A key challenge was to design an appropriate methodology given the relatively low incidence of those with a hearing and/or visual impairment within the UK population (the most recent Family Resources Survey from 2016 suggests that 1.9 million people have hearing impairments, with a similar number (1.8m) for visual impairments⁴).

The research was conducted using Kantar's Omnibus survey which interviews a nationally representative sample of 2000 adults aged 16+ each week. Additional waves of fieldwork were used to boost interviews among those with a hearing and/or visual impairment.

The interviews covered the following topics:

- Usage of linear and non-linear TV/ video services
- Awareness/ usage of access services
- Devices used for access services
- Satisfaction with access services

³ RNIB (Royal National Institute for the Blind), British Deaf Association, Action on Hearing Loss, Sense

⁴ <https://www.gov.uk/government/statistics/family-resources-survey-financial-year-201516>

2.3.3 Qualitative research

The qualitative research focuses on exploring the attitudes and experiences of access service users. In total, 23 ethnographic interviews, consisting of 20 visits with 19 families and lasting between two and two and a half hours, were conducted among people with hearing and/or sight impairments across England (North, Midlands and South), Scotland, Wales and Northern Ireland.

The interview sessions were conducted at the home of the main participant with family members present if additional support was needed. Participants use a wide range of communication methods including lip reading, British Sign Language and/or using hearing aids. Some visually impaired participants experience extreme near sightedness, tunnel vision, difficulties distinguishing colours and complete blindness. A minority of participants have additional needs such as dyslexia and other learning difficulties. Professional sign language interpreters and lip readers were also provided if required.

Each interview explored:

- Participants' journey to their use of access services
- Perceptions and experiences of access services
- Suggested improvements to access services

The informal ethnographic aspect involved observing and recreating participants' experiences of using access services.

A full breakdown of the sample structure is included in the appendices and the sample included:

- A mix of men and women
- A mix of age and social class
- A mix of visual/hearing impairments, skewed towards the more severe
- A mix of participants born with a sensory impairment and those who developed an impairment later in life
- A mix of participants living in urban, suburban and more rural areas across the UK
- A native Welsh speaker
- Participants with a range of digital confidence and a range of devices to access audio-video content

- A representative mix of users of paid and non-paid TV/ linear and non-linear services

Throughout this report, where we refer to qualitative findings, we use the language that the person self identifies with in relation to his or her own impairment(s). We use the terms hearing or visual impairment when referring to people more generally.

3. Profiling the samples

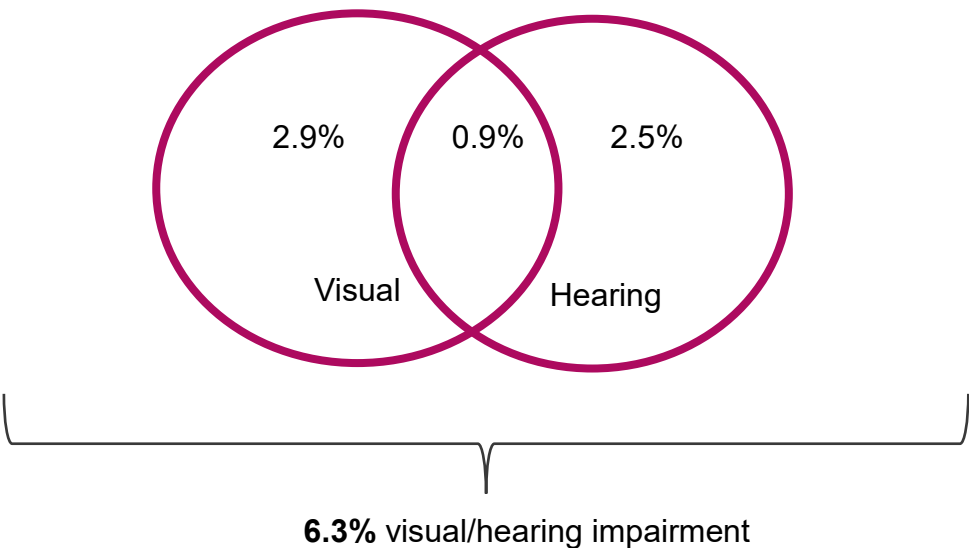
This chapter uses the quantitative survey data to profile people with hearing and / or visual impairments.

Key findings

- People with hearing and / or visual impairments are more likely to be older (almost two-thirds are 65+) and of a lower social demographic (59% C2DE) when compared to the UK general population.
- They are also more likely to use Freeview as their primary television service and less likely to use pay TV services.
- Usage levels of on demand and catch up services are also lower among those with hearing and/ or visual impairments across free and paid for services (e.g. BBC iPlayer and Netflix).

Across all waves of the quantitative survey, a total of 893 respondents define themselves as having either a visual or hearing impairment, or both. This represents 6.3% of the UK population. This is illustrated in Figure 1.

Figure 1: Breakdown of hearing/ visual impairments among nationally representative sample of UK population aged 16+ years



Unweighted base: Nationally representative sample of UK population aged 16+ years (n=2302), all with hearing or visual impairment (n=167).

3.1 Demographic Profile

The profile of people with visual or hearing impairments is illustrated in Figure 2 and shows a skew towards the over 65s. This has implications for messaging and targeting of information as formats such as social media, as discussed further on in the report, are less likely to be of relevance to most of the people affected by the issues identified in this report.

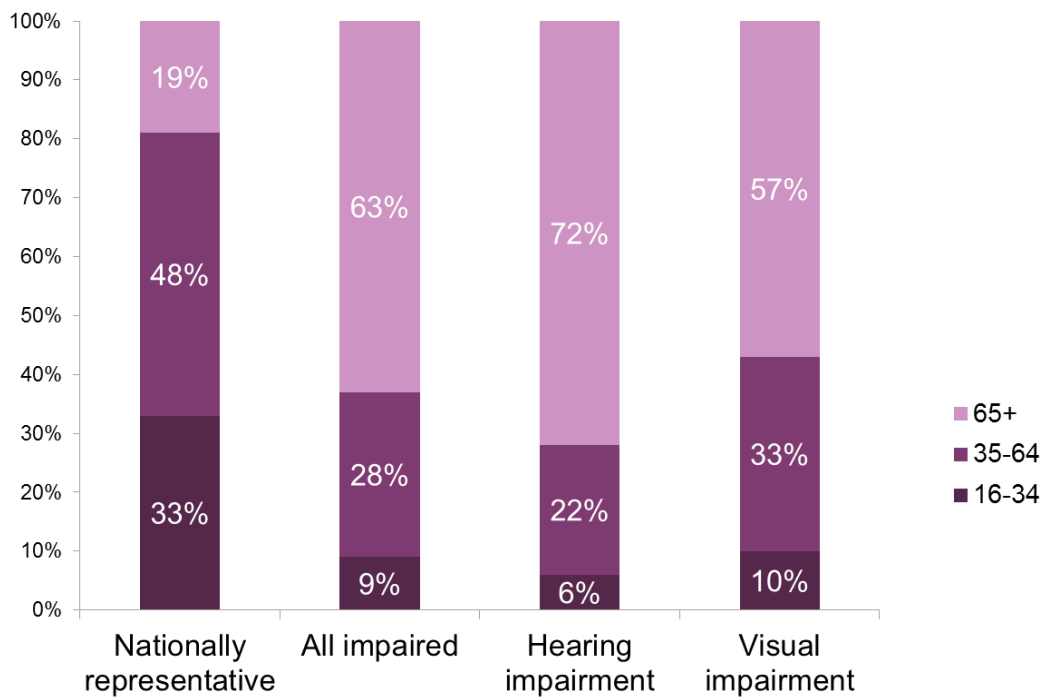
Figure 2: Sample sizes achieved among those with visual/ hearing impairment (including boost waves)

		%	N=893
Sex	Male	50%	450
	Female	50%	443
Age	16-34	9%	79
	35-64	28%	248
	65+	63%	566
SEG	ABC1	41%	363
	C2DE	59%	530

Unweighted base: Total impairment sample (n= 893): All with hearing impairment (n=530), All with visual impairment (n=493)

The skew towards older age groups is particularly pronounced amongst those with a hearing impairment with 72% being aged 65 or over. Nearly three-fifths (57%) of those with a visual impairment are aged 65 or over. This compares to a nationally representative sample where only 19% are aged 65 or over.

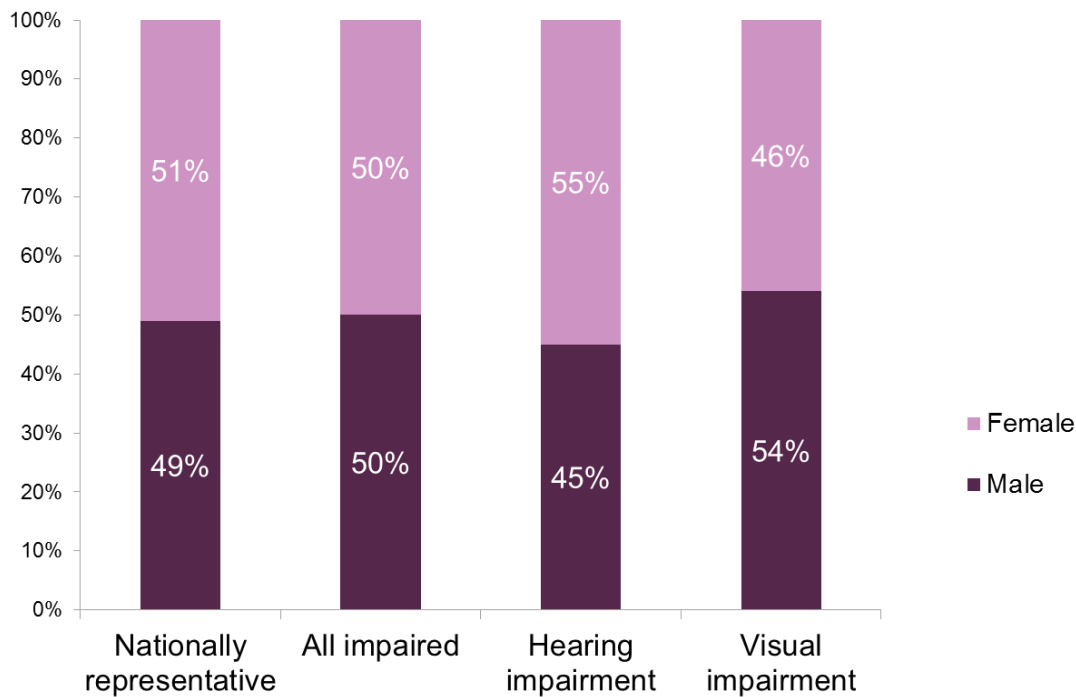
Figure 3: Age breakdowns for sample groups



Unweighted base: Nationally representative sample (n=2302), Boost of hearing impaired (n=530), Boost of visual impaired (n=493)

There are also differences observed in the gender profiles of the groups. Over half, (54%) of those reporting visual impairment are female, with 46% male. Among hearing impaired, 45% are female compared to 55% male. These differences can be seen in the following chart.

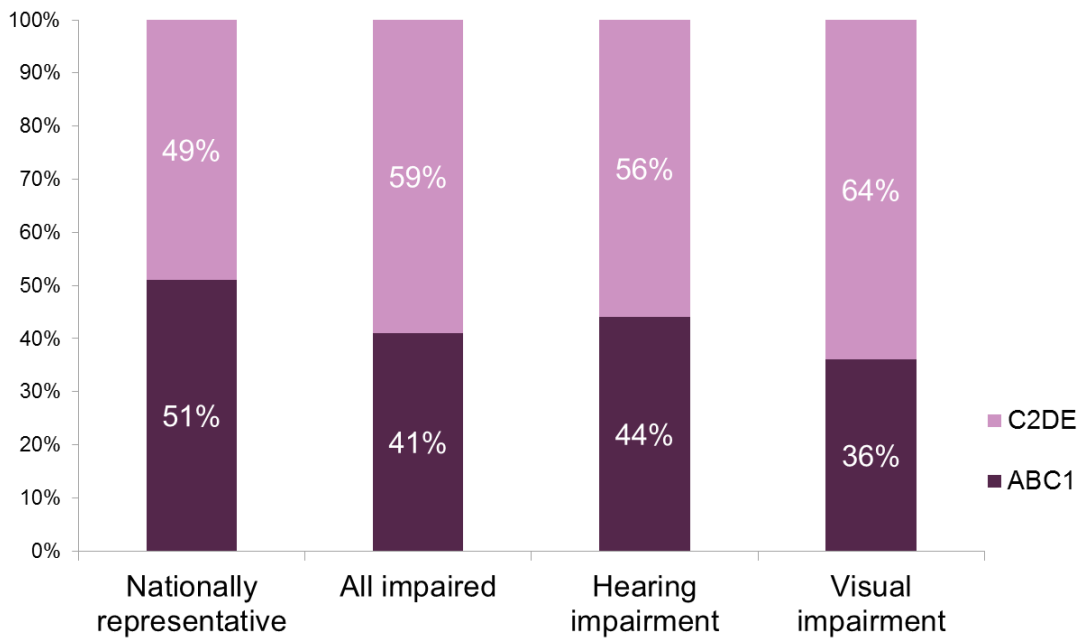
Figure 4: Gender breakdowns for sample groups



Unweighted base: Nationally representative sample (n=2302), All with hearing/visual impairment (n=893), Boost of hearing impaired (n=530), Boost of visual impaired (n=493)

There are also signs that people with impairments are more likely to be from social grade C2DE with 56% of those with a hearing impairment categorised as C2DE, and 64% of those with a visual impairment categorised as C2DE. These compare with a nationally representative population figure of 49% classified as C2DE.

Figure 5: Socio-economic grade breakdowns for sample groups



Unweighted base: Nationally representative sample (n=2302), All with hearing/visual impairment (n=893), Boost of hearing impaired (n=530), Boost of visual impaired (n=493)

3.2 Severity of Impairment

To define impairment level, respondents were asked to select from a list the things that they might have difficulty with because of their impairment. A ‘none’ response was offered as a mutually exclusive option.

As can be seen in Figure 6, around half (51%) of those with a hearing impairment describe it as mild compared to 36% for those with a visual impairment. Just over a third (36%) of those with visual impairment select ‘none’ from the list of options available to them when asked whether they had difficulty with anything. This suggests that it does not have an impact on their lives, presumably as a result of the use of visual aids such as glasses.

It is recognised that the quantitative research is likely to under-represent people with severe impairments, because they are less likely to be able to participate in large-scale surveys without interview accessibility technology. The qualitative research is skewed towards interviewing people with more severe impairments to compensate for this.

Figure 6: Severity of impairment

Severity	Hearing impairment	Visual impairment
Profound	2%	2%
Severe	14%	6%
Moderate	16%	15%
Mild	51%	36%
Don't know/None	2% / 16%	4% / 36%

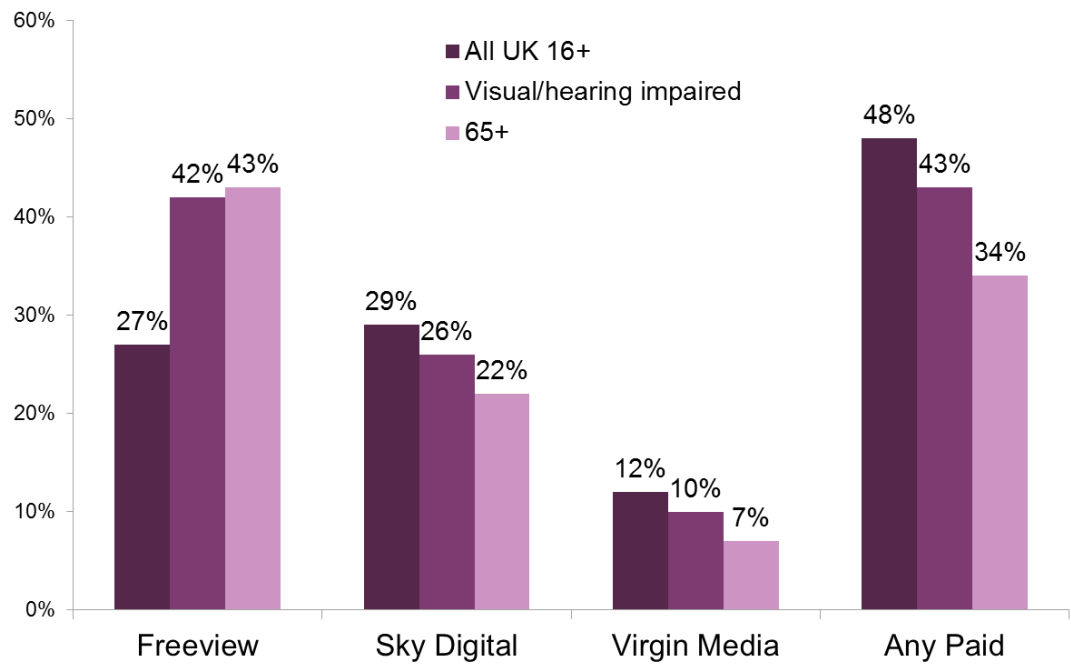
Unweighted base: Total impairment sample (n= 893): All with hearing impairment (n=530), All with visual impairment (n=493)

3.3 Television service usage

As shown in Figure 7, Freeview is the most commonly used television service among those with a hearing and/or visual impairment (42%) followed by Sky (26%) and Virgin Media (10%). This compares with 27% among the general UK population saying that Freeview is the main service they use for live TV.

These differences in use of main TV services appear to be, in part at least, driven by the age profile of those with a hearing and/or sight impairment. The main TV services that the general population aged 65+ claim to use is more in line with those with a hearing and/or visual impairment within the same age group.

Figure 7: Main TV service personally use at home for linear TV



Unweighted base: Nationally representative sample (n=2302), All with hearing/visual impairment (n=893), All aged 65+ from the nationally representative sample (n=622)

3.4 Non-linear TV service usage

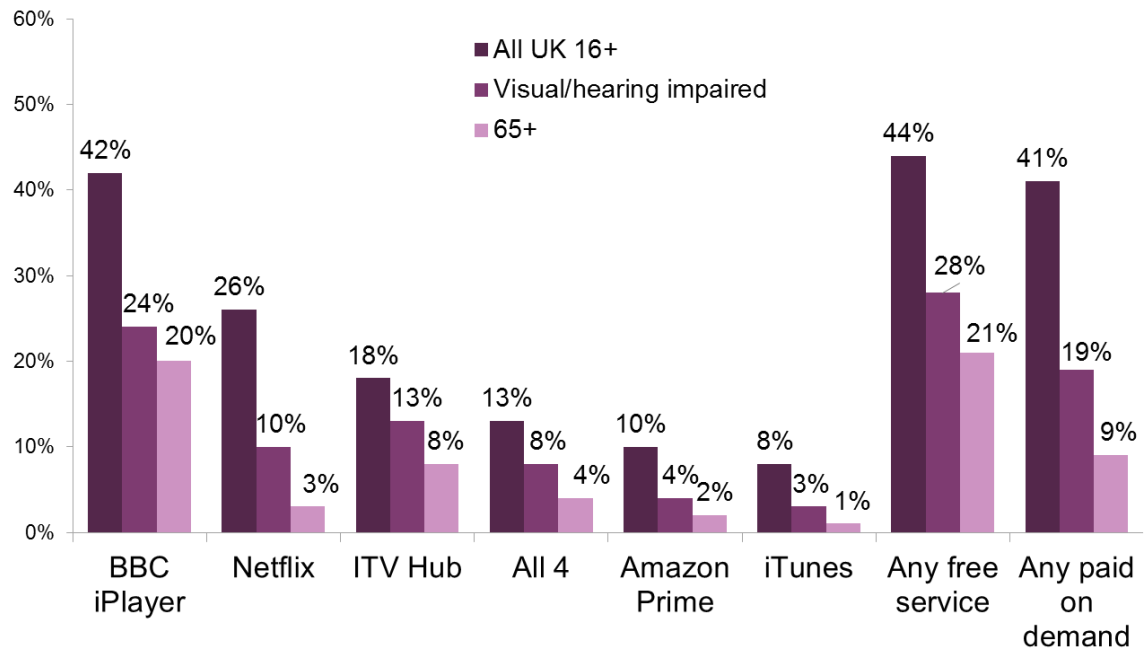
Usage of free and paid for non-linear television services is generally lower among the visual and hearing impaired sample when compared to the general population. Again, this lower usage is, in large part, linked to the age profile of the hearing and/or visual impaired sample as noted in the previous sub section.

Among those with a hearing and/or visual impairment, 28% claim to use any of the free non-linear services and 19% claim to use a paid service. These usage levels are significantly lower than the general UK population where 44% claim to use any free non-linear service and 41% claim to use any paid non-linear service.

BBC iPlayer was the most used of the free non-linear services, used by 24% of those with hearing/visual impairment compared to 42% of the general population.

Among those with a hearing/visual impairment, claimed usage of Netflix is 10% compared to 26% among the general UK population. Usage of Netflix among those with a hearing/ visual impairment is in line with their usage of free services such as ITV Hub (13%) and All 4 (8%).

Figure 8: Services personally used nowadays for non-linear TV, among all aged 16+



Unweighted base: Nationally representative sample (n=2302), All with hearing/visual impairment (n=893), All aged 65+ from the nationally representative sample (n=622)

4. Awareness and usage of access services

This chapter reports on levels of awareness and usage of access services from the quantitative survey.

Key Findings

- Just over half (54%) of those with a visual and/or hearing impairment are aware of access services. Those aged 16-34 are more likely to be aware (70%) and those aged 65+ are less likely (48%).
- The data also indicates that awareness levels increase with severity of impairments with 70% of those with a severe impairment being aware of access services.
- Levels of awareness of access services are significantly lower in Freeview only homes when compared to Pay TV households, which is likely to be age-related.
- Subtitles accounts for the highest levels of awareness and take-up while Audio Description and signing services have very low levels of awareness and take-up, even among those with related impairments.
- Fewer than 1 in 10 (7%) of the general UK population claimed to use subtitles. Figures were higher among the sample of hearing/ visually impaired respondents but remained relatively low (21%).
- Usage of access services through on demand platforms is relatively high while use of access services through connected devices is low, except for subtitles.

4.1 Awareness

Among the total UK sample, awareness levels of access services are low, with less than half (42%) of the sample claiming to have come across any such services while viewing films or (television) programmes.

Among the hearing/ visually impaired sample 54% claim to be aware of any access service.

As the data in Figure 9 shows, this number is largely driven by subtitle awareness levels among those with hearing impairment. Overall across all groups the levels are highest for subtitles, reflecting their wider availability and longer history of use.

Figure 9: Awareness of access services

Service	All UK 16+	Hearing impaired	Visually impaired	Any impairment
Subtitles	37%	54%	39%	47%
Signing	29%	30%	27%	28%
Audio Description	24%	19%	26%	22%
Any service	42%	59%	46%	54%

Unweighted base: Nationally representative sample (n=2302), Boost of hearing impaired (n=530), Boost of visual impaired (n=493), Any impairment (n=893)

When exploring awareness levels by age among the hearing/visually impaired sample awareness levels are correlated to age with higher level of awareness observed among the younger group and lower levels of awareness among the older age group. As can be seen in Figure 10, awareness of access services among those aged 65+ measures 48% and compares to 70% awareness levels among those with impairments aged 16-34.

Figure 10: Awareness of access services, by age among those impaired

Service	Any impairment	Any impairment aged 16-34	Any impairment aged 35-64	Any impairment aged 65+
Subtitles	47%	62%	54%	43%
Signing	28%	37%	35%	24%
Audio Description	22%	39%	31%	16%
Any service	54%	70%	60%	48%

Unweighted base: Total impairment sample (n= 893): 16-34 with impairment (n=79), 35-64 with impairment (n=248), 65+ with impairment (n=566)*

The data also indicates higher awareness levels of access services among those with more severe impairments. For example, awareness of subtitles measures 53% among those with a mild impairment, rising to 70% among those with a severe impairment. It should be noted that this data is indicative, as opposed to statistically significant given the small base sizes available at this level of breakdown. Hence the data is not detailed in a table box.

Levels of awareness of access services are significantly lower in Freeview only homes when compared to Pay TV households. Again, this is related to age. With Freeview homes having an older age profile and older respondents generally having lower levels of awareness of access services.

Figure 11: Awareness of access services among impaired users, by TV type, on demand service usage

Service	Freeview households	Pay TV households	Use on demand services
Subtitles	44%	56%	63%
Signing	26%	36%	41%
Audio Description	20%	27%	34%
Any service	50%	63%	71%

Unweighted base: Hearing/ visually impaired boost sample free TV households (n=378), Hearing/ visually impaired boost sample Pay TV households (n=381), Hearing/ visually impaired boost sample On demand users (n=309)

4.2 Usage of access services in linear TV environments

Levels of access service usage are unsurprisingly low among the general UK population. Fewer than 1 in 10 (7%) claim to use subtitles, with usage of audio description and signing services barely registering (1% each). Figures are higher among the sample of hearing/ visually impaired respondents but remain low.

Usage of subtitles among any hearing impaired respondents is 29% and signing 4%. Usage of audio description services among visually impaired respondents measures 3%.

Figure 12: Access services usage in linear TV environments (Q8)

Service	All UK 16+	Hearing impaired	Visually impaired	Any impairment
Subtitles	7%	29%	11%	21%
Signing	1%	4%	2%	3%
Audio Description	1%	2%	3%	2%
Any service	8%	31%	14%	23%

Unweighted base: Nationally representative sample (n=2302), Boost of hearing impaired (n=530), Boost of visually impaired (n=493)

As severity of hearing impairment increases, subtitle use rises from 29% among those with mild impairment, to 47% among those with a severe impairment* (* = sample size 74). Audio Description use rose as high as 16% among those with severe visual impairment, but there are only 32 such respondents in the sample. Similarly, signing use appears to rise as hearing impairment severity increases but the data is at best indicative due to sample size limitations.

Previous research, such as that conducted by Ipsos on behalf of Ofcom in 2006 (Provision of Access Services, 2006), had found higher levels of impairments (both visual and hearing) within the population, as well as higher levels of access service awareness. In the case of the awareness of access services, we believe that this may be in large part due to questionnaire differences, with greater emphasis given to explaining the nature of specific access services in the 2006 research. However, it is also possible that public knowledge may have reduced in the intervening period, potentially because of the digital television switchover, fewer access service specific awareness campaigns and reduced programme signposting. As such, figures here represent findings based on this specific questionnaire and data may not be comparable with other survey data.

4.3 Usage of access services in on demand environments

Usage of access services among the impaired sample is much higher in those households that have access to on demand services (both free and paid), with usage of access services through these platforms high, likely as a result of the increased technical know-how needed to use on demand services. The users of these services also tend to be younger (for example 49% of impaired users of Netflix and 44% of impaired users of BBC iPlayer are 16-34). Some examples of usage of access services in on demand environments can be seen in the table below.

Figure 13: Subtitle usage via on demand platforms among hearing impaired users using the service (Q9)

On demand service	Subtitle usage via on demand platform among all hearing impaired users
Netflix	49% (base: 49**)
iPlayer	33% (base: 136)
ITV Hub	33% (base: 63*)

Whereas subtitle usage on Netflix is driven by younger age groups (44% of all subtitle users are aged 16-24), as a more well-known publicly funded service iPlayer has a significant older audience using subtitles (23% of all subtitle users are 75+).

This increased technical proficiency is witnessed within the qualitative stage, where more active users of technology and On Demand services are more likely to be familiar with access services.

4.4 Device usage for access services

Respondents were asked about their use of access services on a range of ‘connected devices’, selecting relevant options from a pre-coded list. Given the extremely low numbers of users for Audio description and signing services, it is not possible to explore in any detail the experience of different devices and levels of usage among those with relevant impairments, or indeed among service users.

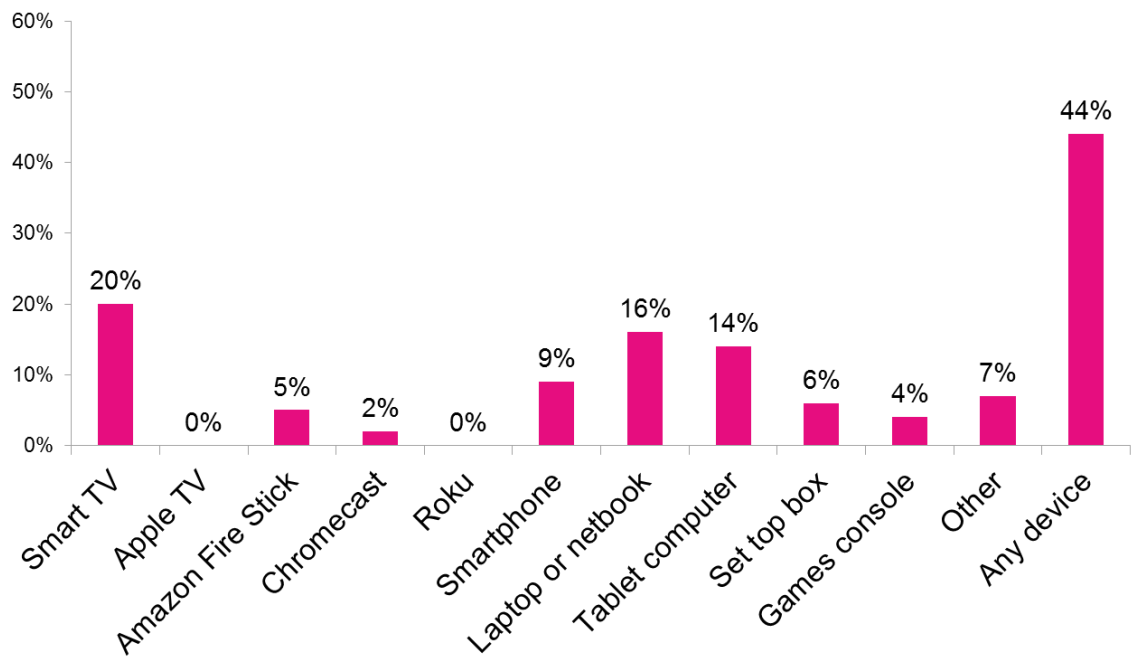
As already seen earlier in this section, subtitle usage is at a significant level across all impairment groups (21%); respondents who had earlier identified themselves as using subtitles were asked which devices they used while viewing in conjunction with subtitles. It appeared that many had

difficulty identifying which types of devices they were using, to the extent that more people said “None of these” (48%) could cite any of the devices in the list (44%).

This may be a function of the age profile of the hearing and sight impaired sample (see figure 3), and reduced understanding of some of the terminology used to discuss these devices. Items such as Apple TV (0%), Amazon Fire Stick (5%) and Chromecast (2%) had very low levels of usage among the sample, though this was not unexpected. However so did the response code for “Set top box” (6%), even though they were almost certainly in use in Sky and Virgin households at the very least. This could be related to the clarification alongside this device which listed Sky Q and Virgin’s Tivo service as examples of such boxes. It may also have led respondents to think of this option as a separate specialist product of some sort.

By comparison, the use of Smart TVs when viewing with subtitles was 20% among subtitle users, with laptops/ netbooks (16%) and tablet computers (14%) also in double figures.

Figure 14: Use of connected devices when viewing with subtitles



Unweighted base: Hearing/ visual impairment sample subtitle users (n=197)

5. Barriers to use and coping mechanisms

The ethnographic qualitative research sessions allowed the researchers to identify barriers to use of access services and to observe, in situ, a range of coping mechanisms adopted by access service users to overcome these barriers and engage more fully with content.

This section explores those findings and provides a useful lens to explore perceptions and experiences of access service users.

Case study participant names have been changed and pseudonyms are used.

Key findings

- Coverage of access services varies widely across different channels.
- Access services can be difficult to find and navigate.
- EPGs can be too challenging to navigate without sight.
- Several issues relating to subtitles are reported including accuracy, speed, colour, location and size, while the availability of audio description can be hard to identify for the visually impaired if it is not audibly announced at the beginning of content.
- Sign language appears to be the poorest of all access services in terms of quality and availability.
- Coping mechanisms that access service users employ range from simply selecting content from a limited choice of familiar content, to adjusting their behaviour or to their environment, to using additional hardware or software solutions.
- Social support is also an important means of coping for some participants.

5.1 Overall barriers to access services

Several themes emerge from the qualitative research around the barriers to using access services. This section outlines some of the most frequently occurring barriers.

There is an inconsistency in the availability of access services across channels, content and service providers

Participants in the qualitative research claim the coverage of access services varies widely across different channels. Many believe that the top four channels have reasonably wide availability while niche and less popular channels are less likely to have access services. Some participants argue that more recently produced content is more likely to have access services than older content, particularly older films. Linear service providers (for example Freeview) are viewed as being better than non-linear services and online providers in relation to the quantity and quality of access service provision.

This may reflect the familiarity of linear service in the public consciousness when compared with more recent technological developments. The BBC is consistently mentioned across interviews as the most reliable at providing subtitles, audio description and sign language. There is a mixed understanding of what access services are provided by new forms of technology such as catch up and online content providers.

One participant describes their experience of inconsistent availability within a series. She had followed a series using subtitles and, for two weeks in the middle of the series, there was no subtitling. Although, it is likely that this would have been related to a technical fault rather than a policy decision, or that a distinction had not been made between linear and catch up viewing.

When access services are not available it can be frustrating for participants. Many quickly dismissed a new provider or service if they had a bad experience, such as not being able to find any access services. If people cannot use access services on their first attempt, they are unlikely to persist and consequently may not keep abreast of changes and updates in the technology.

Access services can be harder for those who are blind and visually impaired to find and navigate, when using EPGs and on-screen messaging

Many participants find it challenging to physically use their equipment (such as the television set and remote) to select access services, or to navigate through the software menus. The physical navigation becomes more challenging when remotes do not have simple, consistent, labelling or buttons that are easy to use. This is particularly important for blind and visually impaired participants.

One participant feels frustrated by the disparity between physical navigation for those who are hearing and visually impaired. They argue that there is a button on the remote to activate subtitles but there is not a button for audio description. The participant also points out a lack of Braille which is another barrier for those who are blind, and the participant's partner argues how ironic it is that the navigation

for audio description users with visual impairments relies heavily on sight. Although the menu options are simple and require minimum 'clicks' this is a much more challenging exercise if someone with a visual impairment is required to read the menu. This difficulty in activating access services can result in feelings of exclusion, reliance on the support of others and a negative viewing experience.

"But that feels like, all of a sudden, you are being excluded, so the deaf have got a button and the visually impaired haven't. I want a button!" (Visually impaired, London)

There does not appear to be clarity or consistency on signposting access services within menus across EPG providers

The participants with visual impairments do not rate EPGs very highly because of factors such as the writing being too small to read and the EPG being too challenging to navigate and interact without sight. One participant relies on their partner to read the content. Another participant describes how they struggle to type using the remote to search as they cannot see. A third participant explained that the size is not adjustable which means they must move closer to the TV screen to read it. They also claim that it does not mark whether there is audio description available.

Participants with visual impairments develop various coping mechanisms to read and navigate the EPG more easily. For instance, one participant resorts to standing close to the screen to read the EPG with the aid of a magnifying glass. Another adjusts the lighting in the room so they can view the screen more clearly. Consequently, for these people, the process of navigating the EPG can be difficult and time consuming. One participant claims she tries to avoid reading the EPG altogether if she can, and frequently resorts to leaving the TV on a specific channel and simply scrolling up or down and memorising the number of movements to get to the channel she needs.

Although participants with hearing impairments can navigate EPGs using sight, it can be difficult for them to find access services enabled content.

"If you go to the Blue Filters [on the EPG] you get Entertainment, HD, Sports, but you don't have [accessibility], it's a logical thing to have. I often go to films and it will show me all the film channels but why not show the audio describing and subtitled channels? (Hearing Impairment, South East)

Many participants rely on printed guides to plan what they view. They may make use of the access services symbol in guides while others rely on familiarity and trial and error. They select content then attempt to activate their access service.

A digitally engaged participant with a deteriorating visual impairment compares their experience of navigating a television versus a computer. She prefers the computer as they can interact with it using

voice over and zoom. Search engines on computers are much quicker and more effective than searching on an EPG. It is possible to select text and have it read out to reduce eye strain, or to zoom into something to view it more clearly. This participant prefers Apple (for computers and mobile phones) as the accessibility technology is already integrated into the main offer.

“With Apple it just seems very intuitive, they have just cut all the rubbish out, there are no buttons you don’t need, it’s very clear when you go into settings, you press the settings and go into Accessibility and it asks you what you want it to make accessible.” (Visual Impairment, London)

There is inconsistency in how access services are provided by different operators

Different service providers operate access services in different ways. Downloaded or on demand content offer access services differently depending on the provider. In addition, the navigation process varies across service providers. For example, some remotes have a button for subtitles or audio description while other remotes (such as the new Sky Q remote control) do not.

This inconsistency might have an impact on how likely people with visual or hearing impairments are to switch service provider, potentially limiting the choice they have as consumers. This could mean they remain with a service that does not provide best value for money to avoid switching to an unfamiliar system, risking having to change their established coping mechanisms. This is the case for one older participant who did change from one provider of cable television to another but then had to change back as it was too difficult for him to navigate and operate.

5.2 Barriers linked to specific access services

In addition to the overall barriers to access services outlined previously, there are a number of barriers associated with specific access services. In this section, we discuss the specific barriers related to subtitles, audio description and signing in further detail.

Subtitles are the most prominent access service but there are still issues with the quality

Both the qualitative and quantitative research found that subtitles are the most commonly used access service. This may be because there are more citizens across the UK with a hearing impairment than a visual one. However, the popularity of subtitles may also be a result of subtitles being more prominent across content, being easier to activate using the menu and the availability of a ‘subtitles button’ on many remote controls.

Subtitles also appear to be the most widely available access service on the mainstream channels but there are still issues with overall availability as much of broadcast media is not subtitled. A variety of different issues are reported by participants throughout the research, depending on their individual needs and the content they are engaging with, demonstrating that in terms of subtitling styles everyone has different needs.

Subtitle accuracy is raised as an issue by some with reports of subtitles not accurately reflecting the film or programme content. Although these participants claim that this is more of an issue on live television such as news programmes. Situations where subtitles would be deleted and amended while on screen are described by one participant while another participant feels it would be better to delay the broadcast to produce accurately timed subtitles. Some participants are reluctant to view live news programming due to poor subtitling accuracy.

“Quite often the words are incorrect, they could be talking about ‘Kofi Annan’ or something and it will say ‘coffee another.’” (Hearing Impairment, Cardiff)

Related to the accuracy of subtitling is the **latency** with the spoken word. Again, some participants believe this is a more common problem on live television. One participant, who no longer views the news because of this, claims the subtitles have a 15 second delay. For another participant with a severe hearing impairment this is an issue when viewing television with their hearing family. While the latency is not so noticeable for this participant, it stands out more for family members and causes distractions. Another participant with a less severe hearing impairment does not view television with subtitles when there are latency issues and prefers to follow along with just the audio.

For some, **subtitle speed** is an issue, with subtitles sometimes changing too quickly which makes it difficult to read, particularly for older participants and those with both visual and hearing impairments.

Having additional user needs such as dyslexia, can impact on how well a person is able to use access services. For participants with dyslexia **subtitle colour** has a significant impact on their ease of use and, for them, customisable text and background colours would support their ability to read subtitles at the speed required to engage more fully with content.

“I do struggle and I have struggled with dyslexia. Sometimes when the reading is fast, it doesn’t always read right.” (Hearing Impairment, North East)

For many the **location and size of subtitles** on screen can act as a barrier to engagement with a few participants describing subtitles jumping around the screen mid programme for no apparent

reason. Sometimes this means visual details in the programme can be lost when subtitles block the action on the screen. For another participant, the ticker style subtitling style adopted by news programming, is preferable. This participant finds it easier to read text that moves slowly within a single stream at the bottom of the screen.

Some participants who speak BSL find English language subtitles much more difficult to follow as it is not their first language. For this group of people, subtitles in written BSL would be preferable and facilitate their ease of engagement.

Case study 1

Andrew is 50 years of age and lives in Scotland with his wife (who is also hearing impaired) and their two daughters. He teaches British Sign Language (BSL) at a local school. His hobbies include football and working on the restoration of his motorbike.

Andrew and his wife are keen to ensure their children speak English as well as understand BSL and often accompany them to the cinema with this goal in mind. Andrew believes all children should be educated at school about the challenges faced by people with hearing impairments.

Andrew prefers to use BSL to communicate and does not understand written English as well. He uses a form of written BSL (simplified English language text) when online. He is reliant on subtitles to view content on TV. He would prefer to read subtitles written in BSL. He is disappointed that televised BSL does not accommodate for regional variations, which would make it easier to understand. He feels frustrated that there is limited availability of signing and they only seem to be available late at night on a few programmes.

It is frustrating for Andrew when subtitles move around the screen and this can obstruct his view, which is a problem when viewing sports programmes, such as football. He can also struggle with the fast pace of subtitles and claims that he only engages with about 60% of the content because it disappears too quickly.

“Subtitles on football are annoying as they go all over the screen.”

Andrew believes some brands perform better in the provision of access services. He believes Sky provides a smaller amount of access services and this reflects badly on the brand. He considers the subscription to Sky to be too high when viewers cannot access much of the content due to the poor provision of subtitles.

“Sky is a big company... it's quite expensive to have Sky for them not to have [better] subtitles.”

Andrew claims that YouTube set the standard in the provision of subtitles in terms of availability and quality.

There is less audio description available and when it is available the quality is poor

As discussed above, blind and visually impaired participants find audio description hard to identify as it is not audibly announced before content is played.

Audio description is less widely available than subtitles and low usage figures are recorded in the quantitative research (3% among all impaired groups and only 4% among those with a visual impairment).

Reflecting these quantitative findings, the qualitative research found that audio description is not widely used among blind and visually impaired participants because of the lack of availability and poor quality.

One blind participant who uses audio description described it as “*pot luck*” as to whether it is available or not. Participants consider the BBC to be the best at providing audio description, reflecting its role as a public broadcaster. Conversely, subscription services are held in the lowest regard; although there is more content (within pay channels compared to Freeview) there is less audio description available.

The quality of audio description is also an issue with participants describing it as having too little detail. One participant describes how this makes it hard to follow the content of the programme, as key details can be missed.

“BBC and BBC iPlayer and that, for a lot of the new programmes it’s pretty good [audio description], it’s quite descriptive and you get quite a lot. But sometimes you do just get ‘a man walks into a room’, so I have found that there are quite big differences between the description and the amount of description that you get.” (Visual Impairment, Scotland).

One participant with a severe visual impairment points out that on screen text messages are becoming a more common plot device. These are often simply shown on screen rather than read out in the audio description and subsequently plot details can be lost.

Another participant with a severe visual impairment describes how audio description can provide too much unnecessary detail which distracts from the storyline and can clash with the dialogue and interrupts the flow of the storyline. An example where the description was too obvious is described:

“They didn’t need to tell us it was a helicopter did they.... no, because you could hear the blades of the helicopter.” (Visual Impairment, London)

Furthermore, there are claims amongst visually impaired participants that some types of programmes such as nature documentaries can have poorer quality audio description when compared with genres, for example sport, which have better commentary through audio description.

Sign language provision appears to be the poorest of all access services in terms of quality and availability

Across the qualitative research, signing is the access service that was rated most poorly for availability. For example, signing is not widely available and when it is available, it may only be scheduled late at night or early in the morning. This means that users are less able to engage with signing as it is provided outside the times they would usually consume media. Participants are unlikely to change their schedules to engage with late night or early morning programming with signing. While there is the option of recording these programmes for viewing at a more convenient time, the low provision of the service, combined with the late scheduling, can give the impression that the service is a low priority to the content providers and can impact on how some participants believe content providers view them.

Some participants also describe how they believe signing is provided in an inconsistent manner across series. Rather than each episode being signed, random episodes appear to be selected for signing. Some participants question the value of this as it does not allow them to engage in any meaningful way with a series. These participants assume this is a choice made by broadcasters, rather than a technical issue, which is the most likely cause.

The issue of regional variation within BSL is raised by participants who communicate through signing. One participant with a severe hearing impairment describes how they and their partner come from different parts of the UK and their sign language varies in conversation. As dialogue is an interaction they adapt among themselves or with people they meet. When signing is on television it is not a dialogue with the viewer, which makes comprehension much more difficult due to the regional variation. One participant from Scotland, who is deaf and communicates via signing, chooses to view New Zealand news updates online instead of UK news as New Zealand sign language is closer to Scottish than the dialect of BSL used on UK news programmes.

“BSL is not true BSL because Manchester and Liverpool have so many different signs, any towns and cities: London, Manchester (or) Birmingham... maybe 70% is the same. (Deaf, North East)

An older participant describes modern BSL as much richer than the variant of BSL they learned previously and still use to communicate with people of their generation. This makes modern content

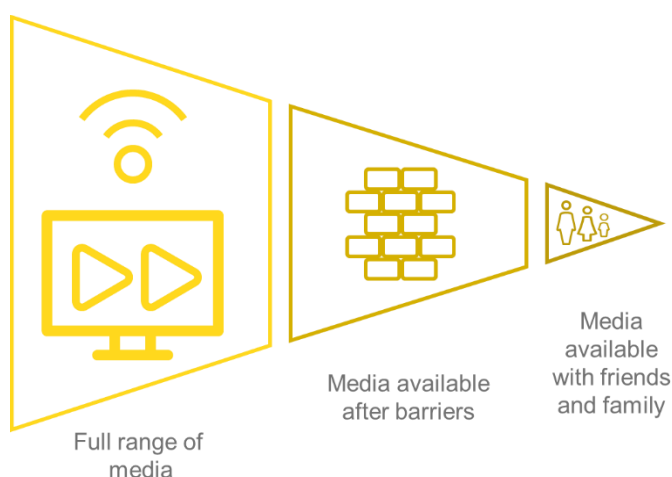
with BSL interpretation much harder for them to engage with. For people of their generation there may be an added barrier if they are not familiar with linguistic nuances or new words.

Furthermore, some participants claim that the positioning of a sign interpreter can block viewing. On some programmes a sign interpreter can be a visual obstruction if signing is not an integrated part of the programme design.

5.3 Barriers limit content choice

The barriers discussed all impacted on participants' experiences of engagement with content through access services. As illustrated below, the full range of media available becomes more limited and the likelihood to view with others becomes less likely as barriers are introduced.

Figure 15: Model showing collective viewing barriers



5.4 Coping mechanisms

The qualitative research highlights a range of coping mechanisms participants adopt to help overcome some of the barriers to engagement. Most settle on a mechanism that allows them to engage in the easiest way possible. Coping mechanisms range from content selection to adjusting and experimenting across a range of different mechanisms.

Most coping mechanisms are habitual (content, behavioural and environmental adjustments) but others require more skill or effort on behalf of users (using additional hardware). In this section, we discuss habitual adjustments before moving to discuss those which require more effort.

Many participants use low effort coping mechanisms to engage with media

The easiest coping mechanism for participants is content selection. They simply select content they can access and avoid content which presents too many barriers, thus limiting the content they can view. Some participants plan their viewing by using listings or the EPG beforehand, selecting the content they would like to view and then checking in the guide whether it has access services or not. Others navigate directly to a programme or film to discover whether it has access services or not.

Some participants avoid certain genres or content they expect to be more difficult for them. For participants with visual impairments examples include crime dramas which are often too dark to follow. Whereas for those with hearing impairments news programmes can be too difficult to engage with as the subtitling has lower accuracy when live.

Many participants rely on habit and prefer to engage with familiar content or content that is easier to follow. One participant with a visual impairment prefers to view a particular programme where the colours and contrast works well for their vision. Another participant with a severe visual impairment explains how they prefer to view familiar programmes such as soap operas as they recognise the voices, making it easier to follow and requiring less focus to engage with the storyline.

“Because I am quite blind now, most of the things I watch are habit based – things that I have watched for many years. With the soaps, I recognise the voices anyway, so it’s more listening.” (Visual Impairment, London)

Some participants report adjusting their behaviour to help engage with media. One participant with a visual impairment explains how their family leaves the television on a certain channel before they switch it off and the participant has memorised the number of clicks to each channel they view. This participant claims that HD channels can pose an additional challenge if the television is left on the wrong channel. For them it is identical to the standard channel but the adjacent channels are different. While it facilitates access, this process can be intricate and relies on other members of the household to work effectively.

Case study 2

Gwen is 84 and lives in Wales. She is a bilingual Welsh and English speaker. She enjoys looking out of her window on to her view of the park and the beach.

Gwen engages with a narrow range of channels. She is a loyal S4C and BBC1 viewer and her favourite genres include news programmes and nature documentaries. Her favourite presenter is David Attenborough.

This participant's hearing has deteriorated with age and she requires a hearing aid, but does not want to use it, because it picks up a lot of background noise. Consequently, she relies heavily on subtitles. She is not confident using technology and has had to rely on her son to activate the subtitles.

"I watch S4C usually, that's where I find the subtitling useful, because although I have these heading aids, I don't find them very comfortable and I find that I lose quite a lot, even though I've got these and they are on and they are pretty strong, I find subtitling much more relaxing and I enjoy it far more."

Gwen prefers subtitles in Welsh rather than English, as she believes Welsh is spoken more slowly than English, which allows for better synchronisation with the speakers and visual content. Consequently, she views more Welsh content than English, which helps drive her loyalty towards S4C.

"Subtitles all the time... my son has put it on for me. Now, I find that with English programmes, quite frankly, it's a bit of a nuisance, because they (subtitles) don't seem to be as quick as they are when they are doing the Welsh programmes. I think perhaps the English speaking fraternity speak a lot quicker and they (subtitles) are not able to keep up with it. And it irritates me then because I'll have heard it in English, and then it will be a little while before it comes on in English underneath."

Unfortunately, Gwen has accidentally deactivated the subtitles which is a problem as she is unable to reactivate them without help. Having a one-click solution to reactivate subtitles would be enormously helpful to her.

Similarly, some participants adjust their environment to facilitate engagement. Some may use a private space to view television where they can make their adjustments (such as having the volume louder) or use access services they believe are more intrusive to others. Consequently, for some of these participants with families there is a sense of losing out on family bonding time. Other participants adjust a shared space rather than retreat to a private room. One participant with a severe visual impairment has added felt fabric to the bottom of the sofa in their home. This means that when they need to they can pull the sofa closer to the television to aid their viewing.

The support of friends and family is important for some

Social support is an important means of coping for some participants. This involves relying on friends or family to describe what is happening while they view content. Participants with visual impairments, note the value of having somebody describe what is happening, which is preferable to audio description in some cases. Other participants report relying on social support to access technology enabled access services. One participant with a hearing impairment describes how her child and partner are much more technologically savvy, and they set up online services with subtitles for her which means she has access to a wider content range than she would have had without this support.

Case study 3

Sam is 78 and lives in London with his wife (Ruth). Sam is a Tottenham FC supporter and enjoys viewing football on TV. Their daughter (Rachel) is a support worker for the hard of hearing and lives locally. She provides a lot of support to her parents on a daily basis and participated in this research session.

Sam has always had a severe hearing impairment and his sight has also started to deteriorate with age. He used to lip read but this is becoming more difficult. His daughter thinks he is in denial as to how much his sight has deteriorated.

“Dad saying he's disappointed, with his eyes he feels the sun has got brighter and it's (his visual impairment) is to do with climate change as he can't see, but he is in denial because he used to drive and do things he now can't.”

Ruth (Sam's wife) also has a severe hearing impairment and relies heavily on subtitles. She likes to have the TV on even when she is not paying attention to it. She finds the slight noise in the background comforting.

The family communicates by touch using a language they have developed together. Sam never formally learned sign language, although his wife learned it at school. Both Sam and his wife can find it difficult to communicate with younger people as the sign language (BSL) they understand is less 'language rich'.

“Mainly (don't use) due to a language barrier he doesn't follow the English language pattern. For their generation ... how they were educated, they explain themselves in a very BSL way whereas the person on the video sign app may be communicating in a much more language rich way.” (Sam's daughter - Rachel)

Ruth enjoys using Facebook and facetime because it makes her “*feel more connected*” with friends and family. She particularly enjoys using FaceTime on her iPad to communicate with her daughter and grandchildren.

Sam views content in his study alone. He has a limited range of content he can view which include old familiar films, news, sports and wildlife documentaries, but it requires a large amount of focus and concentration to follow these. He has a large screen and has to stand very close to view it more easily. It is difficult for the couple to view content together because Ruth relies on subtitles and Sam stands close to the screen. The darker light in his office also helps him to see more clearly than is possible in the lounge.

Sam also struggles with the way subtitles move around on the screen and they appear and disappear too quickly. This can make engaging with content quite difficult and negatively impacts on his viewing pleasure.

“It would be good 100% if you could slow down the speed of everything. That would be much easier for mum and dad. It's quite fast to keep up.”

Ideally, there would also be an option to choose whether to have subtitles provided in English or British Sign Language.

Some participants rely on additional hardware to engage with media. This includes special prescription glasses, magnifiers and viewing equipment or e-readers. One participant with a severe hearing impairment uses special wireless headphones which is linked to the television. While they still use subtitles to engage with the content, the headphones mean they can hear some of the audio which has the added benefit of meaning they can leave the room during advertisements and know when to come back for the programme. This participant had not sought out the headphones, but had applied for a hearing dog and was told his impairment was not severe enough. Instead the charitable organisation provided him with a catalogue of support equipment for the home.

“It allows me to hear without having the television on really loud, and I can walk around with it, so if there are adverts on, I can go in the kitchen and potter around in there and I can hear when the programme comes back on. They suit me perfectly.” (Hearing Impairment, Midlands).

Case study 4

Laura is 49 years of age and lives in Northern Ireland with her partner, three children and her 'hearing' dog. She works for a mental health charity. She loves to read Psychology magazines and is very interested in human behaviour.

Laura was born with partial hearing, which has deteriorated in later life. She recalls a time during her childhood when subtitles were not available and she felt isolated from wider society. When subtitles started to become more available she was able to engage with more content and consequently felt more connected with peers and society more generally.

"It was excellent I didn't feel left out. I could join in with work conversations about watching things."

This participant enjoys viewing a wide range of content and relies on a combination of using a Mini Loop system that links sound from her TV to her hearing aid, or a headset connected to her TV and subtitles to maximise her engagement with the content. She feels strongly that there should be more provision of subtitles across providers and content including subtitles across series and episodes. Laura has been disappointed in the past when starting to view a series and finding part way through that only some of the series has subtitles.

"I just have subtitles on every channel, it makes life easier and more enjoyable so everyone has (the) same (level of) access."

"If you were looking forward to watching something and you've watched a series and then you realise there's no subtitles on the final bit you've recorded ... and you're all disappointed then you search to find another showing and hope that it will have subtitles."

Laura put forward providers, such as Netflix and YouTube as exemplary in the provision of subtitles. She claims Sky does not seem to prioritise access services and this reflects badly on the brand.

Another coping mechanism adopted by some participants with visual impairments includes using the pause button on the television to slow content so they can move closer to inspect the detail.

One participant describes how they are becoming more reliant on their computer as it is more accessible and they can read text out and easily zoom to make it easier to operate than a television (see case study 5 regarding the use of an Apple Mac for this purpose).

"It asks you what you want it to make accessible, do you want it to zoom, do you want it to talk, press that button, job done. What size print would you like it to come up in and it shows you print sizes. The programming can only come in one size on the television, it's not as if you can adjust the size of the text to look what programmes are coming up." (Visual Impairment, London).

Case study 5

Kelly is 42 years of age, and a stay-at-home mum. She lives in Greater London with her husband and 11 year old son. Kelly loves to listen to audiobooks and treats herself to a new one each month.

Kelly is registered blind and has had sight impairment since childhood. She is in the process of applying for a guide dog because recently her vision has deteriorated quite dramatically. This participant is struggling to come to terms with the idea that she might lose her sight completely.

"I have already started from such a low visual point because of the disease that I have got. It [natural age related sight deterioration] feels like a much bigger step and a much bigger loss to me."

Kelly finds it difficult to navigate her EPG and browse content. She uses a magnifying glass to view text on the TV screen and this is time consuming and requires a lot of concentration. Consequently, she has developed various coping mechanisms to make it easier, for instance she always leaves the television set to BBC1 and counts up and down to find the correct channel. There are lots of channels she never uses as she finds it difficult to read the text.

She is increasingly relying on her Apple Mac which is configured with large text size and voice control, which makes it much easier to navigate and view content. Kelly believes TVs should work more like her PC and allow more customisation to increase the font size and provide voice control for navigation.

"The [EPG] can only come as one size on the television... to be able to enlarge the text so I can read it...would be useful."

6. Experience of using access services

This chapter reports on the experiences that participants have of finding, navigating and using access services, including satisfaction with availability and quality and barriers to using access services.

Key findings

- The research reflects a mixed picture in terms of how participants feel regarding the availability, delivery and quality of access services.
- The quantitative research shows that levels of satisfaction with the availability of access services is not particularly high (38%), however most respondents are in the middle of the response scale, suggesting a degree of resigned indifference.
- The qualitative research highlights examples of inconsistencies across availability, usage and signposting. Consequently, many resort to coping mechanisms such as only choosing content with access service availability, or for some, more involved technological solutions
- Among users of subtitles satisfaction with the availability of subtitles on broadcast services reaches 66% (39% very satisfied).
- Despite the relatively low availability of access services on non-linear platforms, the quantitative research indicates that many of those who use these services (such as BBC iPlayer and Netflix) have been able to find and use access services (with particularly high regard for subtitle provision once discovered).
- Within the qualitative research, the more technically savvy participants refer to YouTube as exemplary for providing subtitles quickly on new content, allowing hearing impaired to be able to engage with new content online more easily and in the same way as hearing people do.

6.1 Provision of access services on linear and non-linear TV services

The desk research (see appendix 1) found a disparity in the provision of access services between linear and non-linear TV services. Under the Communications Act 2003⁵, a legal requirement was set for broadcasters to provide access services, regulated by Ofcom. Consequently, there have been

⁵https://www.ofcom.org.uk/__data/assets/pdf_file/0021/81228/channels_required_to_provide_television_access_services_in_2016e.pdf

major improvements in the accessibility of these services by many international and domestic channels for linear TV.

The Communications Act 2003 has statutory targets for broadcasters as 80% for subtitling, which for ITV and Channel 4 rises to 90%, and 100% for the BBC. The requirements for signing and audio description, however, are far lower, with signing at 5% and audio description at 10%. Despite, the BBC, ITV, Channel 4 and BSkyB committing to providing audio description on at least 20% of their content on most channels, these figures reveal a deficiency in the provision of audio description and signing⁶.

While the provision of subtitles on linear services is encouraging, the provision of subtitles on non-linear services such as video-on demand (VOD) tells a very different story. Research carried out by Ofcom in 2017⁷ showed that (between April 2015 and March 2016) 68% of On Demand Programme services did not offer any form of accessibility provision. Although the Communications Act sets a legal requirement for providing Access services for linear TV, there has been no such legal requirement for the provision of access services on non-linear content. However, in February 2017, the government passed an amendment as part of the Digital Economy Act⁸ promising new powers to Ofcom, to set on demand subtitle quotas for broadcasters, along with requirements for signing and audio description.

Despite video content being increasingly available on the web, the majority contains no subtitles or signing. They are therefore inaccessible to many people with hearing loss. This changing landscape is creating new challenges for broadcasters and the users of access services, whose needs are currently not being met.

However, despite the relatively low availability of access services on non-linear platforms, the quantitative research indicates that many of those who use these services (such as BBC iPlayer and Netflix) have been able to find and use access services (with particularly high regard for subtitle provision once discovered).

Within the qualitative research, the more technically savvy participants refer to YouTube as exemplary for providing subtitles quickly on new content. While YouTube's approach to subtitling may have been developed to enable viewers watch content on mobile devices in public areas without disturbing

⁶https://www.ofcom.org.uk/_data/assets/pdf_file/0021/81228/channels_required_to_provide_television_access_services_in_2016e.pdf

⁷ https://www.ofcom.org.uk/_data/assets/pdf_file/0010/100225/accessibility-on-demand-programme-services-report.pdf

⁸ <https://www.actiononhearingloss.org.uk/SubtitleIt.aspx>

others, it is believed to have indirectly led to people with hearing impairments being able to engage with new content online more easily and in the same way as hearing people do.

6.2 Variation across catch up and online

Across the qualitative research there is a mixed awareness and understanding of what online and non-linear content providers offer. Participants who are more digitally confident have a better awareness and understanding of what access services are available. However, those less confident with technology are unsure about what services are available and how to activate them.

Regarding online providers, such as Netflix and Amazon Prime, while some digitally confident participants are aware of whether subtitles are available other less digitally confident participants assume that they would not have access services. Similarly, catch up is perceived as being less likely to include access services amongst those less digitally confident.

Some participants report experiencing inconsistencies between recorded and downloaded content through their digital cable box which reinforces the lack of clarity around availability of access services. Throughout the ethnographic interviews, participants report a lack of consistency around which providers have what access services. However, the BBC is perceived to be the most consistent.

A lack of clarity around signposting on online services is also raised by some. One participant with a severe hearing impairment describes how they hoped to use an online content provider to download films but it is unclear to them whether subtitling is available or not. Consequently, they are unwilling to risk spending the money to find out.

Several participants with hearing impairments spoke about the high standard of YouTube's subtitling. For some, they claim the speed at which YouTube provides high quality subtitles is impressive and means they do not miss being exposed to trending content.

Case study 6

Daniella lives in the South East of England with her partner and youngest daughter. She loves spending time with her eldest daughter, grandchildren and friends who live nearby. She did not expect to lose her hearing completely and consequently is learning to lip read currently. She is more confident lip-reading with people she is familiar with or who have the same regional accent as her.

Daniella loves to watch crime dramas. She relies heavily on subtitles and feels frustrated that she has found so little signposting to content with subtitles. She finds browsing subtitled content to be very time consuming.

“If I didn’t have subtitles ... I wouldn’t be able to watch TV. It would be a waste of time.”

Daniella is a Sky subscriber and she claims the brand does not prioritise access services or seem to value hearing impaired viewers. She feels frustrated that she cannot use subtitles with on demand services and resents paying the same subscription as people with hearing who can engage with more content. She felt so strongly about this that she asked her partner to phone Sky to complain about it on her behalf. She claims she did not receive the discount she had hoped for.

“I got my partner to phone up Sky about it... I thought I should get a discount on my TV because I can’t watch the box sets, I can’t watch catch up.”

Daniella has used subtitles on content provided by Netflix at her daughter’s house and is thinking of subscribing to this service. She is not sure whether Amazon Prime provides subtitles. She believes it is difficult to find out whether access services are provided and the level and quality of provision until trialling the service.

6.3 Satisfaction with availability of access services

Among those with hearing/visual impairments, levels of satisfaction with the availability of access services are not particularly high (Figure 16).

This is the case for availability through traditional linear TV services (e.g. Freeview, Sky) and for on demand platforms, reflecting a wider sense of people with impairments having to ‘make do’, as captured in the qualitative research.

Despite this, it should be noted that although satisfaction levels for availability of services are not very high, those specifically claiming to be dissatisfied are a smaller group still. In fact, most respondents tend to be found in the middle of the response scale, again suggesting a degree of resigned indifference.

Among users of subtitles satisfaction with the availability of subtitles on broadcast services reaches 66% (39% very satisfied).

Figure 16: Satisfaction with subtitle availability, by group

Subtitles	Impaired and aware of subtitles	Impaired and use subtitles
Net: Satisfied	50%	66%
Neither satisfied nor unsatisfied	38%	23%
Net: Not satisfied	11%	11%

Unweighted base: All with hearing/visual impairment (n=893), All with impairment and aware of subtitles (n=423), all with impairment and use subtitles (n=197)

The figures are not as encouraging for audio description availability, with the percentage of those satisfied some way below the figure for subtitles.

Figure 17: Satisfaction with audio description availability, by group

Audio description	Impaired and aware of AD	Impaired and use AD
Net: Satisfied	30%	Base not sufficient
Neither satisfied nor unsatisfied	59%	Base not sufficient
Net: Not satisfied	12%	Base not sufficient

Unweighted base: All with hearing/visual impairment (n=893), All with impairment and aware of audio description (n=200).

Base sizes do not allow a detailed analysis across impairment severity levels but these appear to be generally in line with the groups as a whole.

Satisfaction figures regarding availability through on demand platforms suggest a positive view when asked of users of these services. For example, among those using subtitles via on demand services (base: 80*), satisfaction reach 65% (44% very satisfied).

6.4 Satisfaction with quality of access services

There are few services with enough users to allow a large enough base for robust, statistically significant analysis of the data, however there are some strong indicative findings.

Subtitles are clearly the most frequently used of all access services and of those with impairments using subtitles (base, boost sample: 197), 68% are satisfied with the quality of subtitles provided through their TV (40% very satisfied). Only 10% claim they are not satisfied.

For on demand services the base sizes were smaller but there was indicative evidence that provision of subtitles on BBC iPlayer (base: subtitle users on iPlayer, 53**) and Netflix (base: subtitle users on Netflix, 31**) was very highly regarded, 74% and 81% of respectively saying that they were satisfied with the quality of subtitle provision on these platforms. Unfortunately, these were the only such services with bases of more than 25 respondents.

Quantitative data on satisfaction of audio description (AD) and signing is not available due to low bases.

7. Perceptions around use of access services

This chapter explores the positive and negative feelings that participants in the qualitative research have about access services. As highlighted in a recent Ofcom statement⁹, television can be vital to participation and inclusion in social and cultural life, but for many with hearing and/or visual impairments, that inclusion relies on the provision of access services – and how individuals perceive and experience access services impacts on their ability to participate and be included.

Key findings

- When access services meet the needs and expectations of users, there is a positive impact on user's sense of self and their ability to keep up to date with news, current affairs and cultural content. Effective access services are viewed as a recognition of people with sensory impairments.
- Access services are highly valued by users and when access services are not available, or do not meet the needs or expectations of the users, the sense of disappointment is profound and reinforces feelings of isolation and marginalisation.
- Due to the problems that participants have experienced; including the difficulty participants have had finding and navigating towards services, and the barriers faced when using them, participants from the qualitative study generally feel that access services are regarded as being low priority for platform and content providers.
- The BBC is perceived to be the most inclusive provider in relation to the provision of access services.
- The provision of subtitles is considered better today than ten years ago, primarily because they are more widely available.
- Younger users of access services appear to have a greater sense of inclusion and engagement which may be related to greater digital confidence.
- Access services have educational benefits including developing English language and BSL skills, reading comprehension and keeping minds active.
- Those who do not identify with having a sensory impairment can be less engaged with access services and even when access services are available, engaging with content through access

services can require an increased level of effort and can negatively impact on user's enjoyment of the media.

- The need to rely on access services can leave users feeling different and reinforce their feelings of loss or disconnection from society, especially as access services are not always delivered in a way that is conducive to shared enjoyment of content.

7.1 Positive perceptions of access services

Access services make participants feel valued in society

Overall, there is a relationship between positive experiences of access services and participants feeling recognised or valued by society. Participants view access services that work, and work for their situation, as a recognition of people with sensory impairments; recognition being an important driver towards inclusion. To work, access services need to be high quality and readily available as well as fit for individuals' unique needs.

Participants assert that people with sensory impairments have the same right to enjoy broadcast content as sighted and hearing people do. This is exemplified through participants' varying and changing experiences of using subtitles. For older participants and those who have used subtitles for a long period, they believe that subtitles have improved over time. The provision of subtitles is considered better today than ten years ago, primarily because they are more widely available. Consequently, some participants feel less excluded today from broadcast media content which is an important part of our culture.

Furthermore, when sensory impairments are given a greater visibility across broadcast media it strikes a chord with participants. Multiple participants speak highly of CBeebies with one mentioning Mr Tumble, a children's presenter, who uses sign language while speaking. Parents believe this helps to normalise sign language for a younger generation. One deaf participant mentions that her son is "not bothered" by the signing on CBeebies, which means she and her son can view television together.

"There is one programme, Mr Tumble, which is always on TV. He signs himself. It's not in the corner." (Deaf, North East)

Another deaf participant, a young woman with a deaf toddler son, mentions the use of sign language by CBeebies children's presenters as a positive experience, which she did not have growing up. Due to budget constraints, she was placed in a separate class with only deaf pupils when she was in school. Consequently, all her friends are (now) deaf or hearing impaired. She feels her son will be

able to connect better with hearing people and that they will have a greater respect for her son's deafness because of programmes like these. For her, the normalising of sign language within young children's television programmes makes her believe her son's deafness will not have the same barriers that she experienced as a child because the show gives visibility and language skills to hearing and deaf children alike.

Access services enable connections

When access services are utilised and work in a way that is useful to participants' individual needs they can have a positive impact on their sense of self, and support active participation in culture and society. Without access services, some people are not able to fully engage with the media that forms a central part of our shared culture.

Because of the value that users place on access services, and their reliance on access services, there is a profound sense of disappointment and frustration when access services are not available or are not satisfactory.

"I don't know why these things even have to be pointed out with the amount of money these companies are earning." (Hearing Impairment, South East)

There is a sense among many participants that the BBC sets the standard when it comes to access services and is the most inclusive channel. This perception may reflect the BBC's place in the public psyche as the national broadcaster with a responsibility to provide content to all. In addition, the BBC has historically tended to be the first in many advances relating to access services, such as live subtitling and the development of audio description. It may also reflect participants' more positive experiences with the channel, discussed below.

Access services can keep participants informed and facilitate engagement with wider culture

It is important for participants, especially if they are feeling isolated due to their impairment, to 'keep in touch' with the wider world. Access services enable them to keep up to date with news and current affairs as well as with programmes in the cultural sphere. One participant, who is deaf, likes to be able to discuss with her partner what is happening in the news and access services facilitate that engagement. For many of the participants, simple acts like being able to have a conversation about a programme they have viewed are only possible because of access services.

*“Subtitles are important... to find out what’s going on or what the gossip is... so [you] can feel more involved in what is going on and can have conversations about what has happened.”
(Hearing Impairment, Wales)*

Generational differences in relation to attitudes towards changing technology, are apparent. It appears from the qualitative research that teenage and young adult participants feel a greater sense of inclusion and engagement with wider culture when compared with older participants. Being natives of the digital landscape (having grown up using digital technology) means they have an outlook and digital confidence that most older participants simply do not have.

For example, one participant in her early twenties speaks about how she regularly views Netflix – the subtitles enable her to stay on top of new programmes and discuss the content with her friends (this is also reflected in some of the quantitative findings).

This is important as it relates to socialising and social status. Being ahead of, or at the very least keeping up with trends, is of value to this participant. Access services (and their wider coping mechanisms) allow users to contribute and be independent among their peer group rather than on the fringe or excluded.

“I only started watching [a particular programme] a couple of years ago... everyone was talking about it and I didn’t watch it because it didn’t have subtitles. Now I have caught up online and have carried on watching it on TV.” (Hearing Impairment, London)

For participants who are technologically engaged, the advent of social media (particularly Facebook) has created a new space to be involved in group conversations (about content and other topics) which fosters inclusion. One participant likened the experience of talking via social media to how they imagine it feels for a group of friends to be talking in a pub. Another mentioned a deaf and hearing impaired activist group on social media where people online regularly discuss the issues they face including issues with communication.

Case study 7

Paula is 43 and lives in London with her husband and two children, who are also hearing impaired. She is an avid baker and owns a cake baking business. When Paula is not working and baking, she enjoys walking her dog and spending time with her family.

When she was younger, Paula felt quite isolated, because her hearing family and peers did not understand the experience of using a hearing aid. She also recalls a period in her life when her father replaced their TV with a newer and larger version. She did not know how to access subtitles on the

new TV and could not engage with the content. Consequently, she felt even more isolated and disconnected during that time.

“When growing up, Dad sold the TV that had subtitles... I missed out on so much... I became more immersed into studies... I didn't socialise as much... subtitles do make a big difference because you are able to keep up with everything that's going on. Even watching films, you can share with your friends, you can talk about it. Without subtitles, you can feel completely shut out. Trying to explain that to a hearing family, they don't always understand.”

This participant believes her confidence increased when she began to use access services again and particularly after meeting her husband. She is quite technologically savvy and enjoys using Facebook, which helps her to feel connected with her peers, her community and also wider society. However, she is concerned that it is difficult to communicate with her father, who struggles to read text messages.

“Being deaf can be very isolating... Even when we go out with a group of friends, I feel a bit left out, especially in noisy environments, it can be really frustrating - I can't keep up with the conversation. Facebook is more social, can keep in touch with people more.”

As her children are also hearing impaired she worries that they might miss out on certain aspects of popular culture, because they cannot always engage with as much content as their peers, which might affect their connection and relationships with them.

Access services enable users to engage with education content and build language skills

Participants in the qualitative study highlight educational benefits linked to access services including developing English language and BSL skills, reading comprehension, keeping minds active and access to educational resources.

Subtitles support English skills which can be valuable for those who do not speak English as their first language. One participant describes her experience of first using subtitles at age 16. Subtitles helped her learn how to spell in English which built her confidence in comprehension.

“(Subtitles) helped me to catch up with English. It helped me to spell, helped me to learn and gave me a lot more confidence.” (Hearing Impairment, Wales).

Another benefit of subtitles relates to improving general reading skills. A deaf mother of two children who has grown up in a house using subtitles believes her children read much faster than peers who may have not had as much exposure to subtitles. Another participant who developed a severe hearing

impairment later in life described how initially they found reading subtitles exhausting but now it is much easier to keep up with them.

Programming with BSL is useful for teaching and learning the language. According to the participant who mentioned Mr Tumble (CBeebies), another benefit of his signing is that it supports her son in learning how to sign.

“It’s helped my son, so he can learn more.” (Deaf, North East)

Older participants, (particularly those who are more house bound) tend to argue that television is useful to keep their minds active. Game shows and documentaries are an important source of stimulus for them. Their engagement is facilitated by access services and it helps them to exercise their minds.

Access services support relationships with family and friends

When access services work effectively, participants do not need to be as reliant on their family or friends to explain what is happening when they are viewing content. This allows for greater independence and an environment where users can relax and enjoy television without having to concentrate hard on the content or interrupt their viewing partner.

Subtitles are considered the least intrusive for sighted and hearing friends and family and using them allows participants with hearing impairments to enjoy content with others. For those living with their families, viewing films together is an important opportunity to relax and bond and when access services can facilitate this they are highly regarded.

Some participants with hearing impairments describe how without access services they must turn the volume on their television up very loud which has a negative impact on others. One participant who uses subtitles and headphones describes her freedom to view whatever she likes without having to worry about her neighbours hearing the television.

Case study 8

Ben is 42 and lives in Scotland. Ben has a variety of animals at his home including his guide dog. He enjoys streaming music and listens to podcasts or audiobooks when he is on public transport.

This participant has been visually impaired for about nine years and lives with his partner and three children. He works for RNIB training people with sight impairments about accessibility features in technology.

Ben engages with a wide range of content across devices. He regularly streams programmes on a tablet and uses a magnification tool and glasses to view the content on this device. Phone screens are too small so he cannot use his smart phone in the same way.

Ben sometimes relies on audio description when it is available and thinks it has improved in recent years, in terms of availability and better synchronisation with voice and visual imagery.

However, he only uses audio description when viewing alone. He does not like to use audio description when he is viewing with others because it can detract from the pleasure of viewing for his friends and family.

"I will use audio description.... only when there is nobody else in the room... I don't like to upset everyone by putting it on because it can be a bit distracting for the kids... So, when it comes to using audio description, I tend to use headphones or it's usually ... when everybody else is in bed."

Ben enjoys viewing content on his PC because he can use Windows magnifier and searching for content can be much easier using Siri.

"On top of special glasses, I have to wear as well. I can't just rely on digital magnification... I have to adapt. I use Zoom text at work, iPad and iPhone use zoom... I also use voiceover. On the Android devices, use magnification, use talk back and OK Google which is Android's version of Siri, so I am well versed in a lot of accessibility features, partly because I have to be, for my job, but I like to keep up to date myself as well."

7.2. Negative perceptions of the state of access services

This section will explore how the absence of access services, or when access services are not fit for purpose, can impact on participants' enjoyment of media and the wider world.

Access services are not always delivered in a way that is conducive to shared enjoyment

Participants are concerned that access services, especially audio description, can detract from others' enjoyment when they view television together. Although families that participated in the interviews are supportive of those with sensory impairments there is a feeling from participants that their family members with hearing and sight must 'put up with' them using access services, which can reduce the viewing pleasure for those who do not need it.

One participant describes how their family never complains about subtitles when viewing together, but they notice that whenever they turn on the television after family members have viewed something without them, the subtitles are deactivated. This participant feels their family prefer to view the television with subtitles switched off. Another describes how he feels having audio description on while viewing films with their children would ruin their experience.

"If I am sitting watching stuff with the family I don't tend to use audio description because it ruins their experience... having this dull voiceover telling them what's going on... I just think it's a kids' thing. (Visual Impairment, Scotland)

Poor quality access services can impact on the enjoyment of media content and reinforce feelings of being disconnected

Low quality or disparate provision of access services can spoil the experience of media content. Even when they do work, for some, the reliance on using different tools to hearing and sighted people can reinforce their feeling of loss around the deterioration of their senses. This can compound and reinforce their feelings of a loss of connection with society and culture.

Case study 9

Jonny lives with his wife and adult daughter in the north of England. He keeps fit by running and training for marathons. He developed a hearing impairment eight years ago, following an infection in his ear. He uses a hearing aid but does not like to wear it as he finds it embarrassing, because he closely associates hearing aids with being elderly. To compensate for not using his hearing aid he has taught himself to lip read using YouTube videos.

"I do have a hearing aid [but] I don't actually wear it. I find it embarrassing... as I'm in my early 40s."

Since developing hearing difficulties, Jonny engages less with media, and spends more time alone and outdoors. He has dyslexia, which makes it difficult to read subtitles quickly, so he increases the volume, which has a negative impact on others in the household. He enjoys listening to the radio in the car alone, because he can play loud music and not worry about upsetting others.

"If my wife comes in after being out she'll come up and tell me to turn it down... so then I'll just switch it off or turn on subtitles."

The range of content he engages with is narrow due to the challenges he faces. He still enjoys viewing sport as he can rely heavily on the visuals for this.

"I enjoy sport because you don't really need subtitles... You can see who is playing and what's going on... can still get the atmosphere with the crowds cheering... I struggle with films and dramas as I

can easily lose the thread of what's going on. Sports and cookery programmes are quite visual and easy to follow."

Jonny feels frustrated when subtitles are not available across series, and this has happened recently with a programme called 'Lucky Man', where an episode did not include subtitles and this episode proved integral to the overall storyline.

"I was watching Lucky Man, and one episode didn't have subtitles on it. That was frustrating... Missing one episode was really missing a key part of the plot."

Jonny believes provision and quality of access services will not improve without more regulation. He believes media providers do not prioritise access services and will not invest in it without encouragement from regulatory bodies.

Those who do not identify with having a sensory impairment can be less engaged with access services

Some participants might not identify as having a sensory impairment, or want to be defined by their impairment. The qualitative research findings suggest this is more likely among those who have developed sensory impairments later in life, or who have experienced an unexpected deterioration of their hearing or sight – potentially resulting in a sense of embarrassment relating to the impairment and slower adoption of coping mechanisms.

Coming to terms with a sensory impairment is a significant life change and adapting is a huge adjustment which may cause distress or depression. Consequently, rather than using access services as a way of engaging with media, some choose to withdraw instead. For example, instead of using subtitles with family or friends, participants might engage with programmes in a separate room where they can adopt coping mechanisms, such as having the volume very loud. One participant with a hearing impairment describes his car as "a cocoon" – a place where he can listen to his music loud and without distraction or background noise. Another participant describes having to make significant adjustments to watch programmes. He needs to stand close to the screen and adjust the lighting to view, and consequently often uses his study to view programmes relating to news, documentaries and sport.

In these situations, participants can rely more on limiting themselves to viewing content with a familiar plot or format, or relying on their knowledge of characters' personalities and voices.

Case study 10

Claire is 65 years of age and lives in Scotland with her husband. She enjoys going to the gym. Her family live nearby and her sister and daughter provide a lot of support on a daily basis.

Claire's sight has deteriorated more rapidly in recent years, and subsequently it has become difficult for her to feel independent and do simple things that used to be part of her daily routine, such as reading books because the text is too small, or shopping for clothes because she can no longer see the colours and patterns clearly. She has yet to adjust to these changes and she feels a strong sense of loss. This loss is felt in two ways; she feels she can no longer participate in some of the activities she used to enjoy and also the loss of her independence.

"The biggest thing about sight loss for me, and I suppose for a lot of people is the loss of independence, I was driving up until about 5-6 years ago, when I left work and that was a big loss as ... my sight got worse I was unable to go out on my own and that was a huge loss because as well as being an avid gym going and avid reader I was an avid shopper! And now I have to depend on my daughter or my sister or whoever takes me with clothes shopping."

Claire is not confident using technology and relies on her brother-in-law to download audiobooks for her to listen to. She loves listening to the radio throughout the day for the music and snippets of information it provides. This helps her to feel connected with wider society.

She has recently discovered The Chase and finds it easier to follow as it has a simple colour palette which makes it easier to view. She also finds it easier to view films at a cinema, due to the large screen.

"I don't watch huge amounts of television, you know I watch soaps and that, and really good dramas, as long as it's not a period drama whereby it's basically black and white. But for whatever reason (The Chase) that's the best programme for visually impaired (people) because it's so bright and then of course you've got the evening and it's dark so I don't have the problem of the light coming in (to the room where the TV is)."

Claire's husband discovered audio description by accident and she has some experience of using it, and became quite reliant on it for viewing content alone. She is reluctant to use it when viewing with others as she thinks it will detract from their viewing pleasure. Increasingly she views content alone because of this. She is also confused as to why it doesn't seem to be available on all content.

"[Audio description is a] huge benefit because it's like somebody reading you a story, and you've ...seen the story unfold and [can keep] up with it...My husband actually discovered it by accident, he was trying to get whatever it was and there was this box came up and it said Audio and he put it on, but it only seemed to be in certain channels and certain programmes, it wasn't for every programme on every channel and I don't know why that would be and equally I don't know why I'm not getting Audio now. I particularly had it on for things like Emmerdale and Coronation Street, there was Audio

always on those and sporadically on other programmes but I need to try and enquire why it's gone and if it's available I should be using it all the time. I would like to use it all the time."

Unfortunately, she believes that she may have accidentally deactivated audio description on her TV and does not know how to reactivate it.

When access services are not available or less than satisfactory it may enhance a feeling of being marginalised among those with sensory impairments

For participants with sensory impairments access services represents fairness and not special treatment. One participant speaks of her love for crime dramas which they cannot always access as there are not always subtitles available via on demand services. They hope for all content to be accessible to all in the future.

Similarly, when participants with hearing or visual impairments cannot fully contribute to the social aspect of viewing content it highlights their differences from hearing and sighted people. This can contribute to a feeling of detachment or marginalisation from their social circles.

Participants feel access services are a low priority for service and content providers

When access services are not available, or are of poor quality, participants who need them can feel like they are being excluded from culture and be disappointed they cannot engage in the same way that other people can. Some younger participants speak of their desire to be on top of the trends, and while not directly related to the topic of broadcast media, an example is given of feeling excluded and disconnected from popular culture at the prospect of visiting cinemas. Screenings with access services seem to be low priority, with late screenings of new films and showings made available at unpopular times of the day. It can be impossible for participants to view new films where these services are not provided by the broadcaster, or where there are issues relating to services and devices not being technologically compatible.

There is low awareness and poor understanding of the regulatory status relating to the provision of access services and broadcast media. There is a sense that the BBC may have an obligation to provide access services but there is a lack of clarity as to service and content providers' legal obligations. One participant describes not being aware of specific access services legislation but assumes the Disability Discrimination Act has provisions. Another believes there must be a certain level of accessible programming but feels it should be more widely provided. Participants expect more to be done in the future to ensure content is more accessible.

The need for access services is not always understood by sighted and hearing people

Some participants who grew up in hearing and sighted families report feeling disappointed when sighted and hearing relatives fail to understand their need for access services. They recognise that this generally comes from a place of ignorance rather than maliciousness, but it still creates negative feelings. One participant with a hearing impairment describes how when she was younger her family got a new television without access services and that he had not realised the implication of this.

"My dad, when I was 18, sold the TV with the subtitles... and I was so upset. He couldn't understand, he thought 'we're going to have a bigger TV' and he thought maybe I'd hear more." (Hearing Impairment, London)

Participants describe the reluctance of hearing and sighted family and/or friends to view television with them using access services. Some do not go to the effort of engaging with television with people outside their family because of this.

Using access services can require greater levels of effort

Engaging with television or consuming media via access services can be hard work. For example, the degree of concentration required when using subtitles can make it difficult to relax and enjoy the content. One participant describes not being able to multi-task while viewing television with subtitles. This means it is not possible to eat or drink while trying to follow a storyline via subtitles. In addition, engaging with content can be very tiring, particularly for older participants or those with dual impairments.

8. Conclusions

This research demonstrates how important access services are to those with a sensory impairment, in order, for them to be able to easily access and fully engage with media content. When access services work well, they can have a strong positive impact and foster a feeling of being valued, included and active members of society.

The quantitative research identifies that awareness and usage of access services can be improved and the barriers to use such as the availability of access services across channels, content and service providers, and inconsistency relating to the provision of services, navigation and quality.

Awareness and use of access services is influenced by the degree of impairment, but access to subtitles, audio description and signed programmes can also be reliant upon a variety of factors including provider issues, technical issues and, for many, the availability of friends or relatives to help.

Satisfaction varies widely depending upon how 'proficient' users are. Regarding availability most seem to be resigned to making do with what they can get. The research highlights an appetite for greater provision of access services across the broadcast landscape and suggests a need for further improvements to the quality of services.

Participants seem to have a more positive experience with subtitles, although there are still issues relating to quality. British Sign Language and audio description services receive the most criticism. EPGs lack support for those with visual impairment and navigation of content could be much easier to use with increased streamlining.

Currently, participants compensate for low provision and quality of services by developing various coping mechanisms to browse and select content and can often 'make do' with less than satisfactory levels of engagement.

Participants appear to have a clearer sense of what to expect from linear broadcasting platforms, while those who have greater digital confidence and frequently use on demand services are finding that certain services can and do deliver high quality provision. However, there is limited understanding of access service provision across on demand platforms among the wider audience and user numbers are limited. Within the qualitative stage, for example, those with lower levels of digital confidence are less likely to expect catch up services, to offer any access services at all.

Improvements to the provision, quality and promotion of access services will allow for greater engagement with content and easier access to them, and help to avoid the marginalisation of a

hearing and visually impaired audience. However, specific preferences regarding improvements also depend upon personality, user types and the type of content they wish to engage with.

Appendix 1 – Desk research

The researchers conducted a review of some of the existing research carried out by relevant organisations and key learnings from these findings helped to inform the design of the research programme. A summary of key learnings from specific relevant organisations is outlined below.

Action on Hearing Loss

Action on Hearing Loss is the largest UK charity working on behalf of the UK's population of people who are deaf or have hearing loss.

The Action on Hearing Loss Policy produced a report in 2015⁹ which includes information that helped to inform the design of the research quotas for the qualitative stage of this research. The report claims that respondents are generally older. It was important to bear this in mind during recruitment and to monitor age as recruitment progressed, to ensure we captured participants across a wide range of ages.

Action on Hearing Loss also released an annual survey report in 2008¹⁰, which identifies gender and age as factors which influence subtitle usage. The report claims that women are more likely to say they use subtitles all the time, whereas men tend to claim to use subtitles only for specific programmes. Another learning was that older respondents find it harder to read subtitles. Anticipating these trends in advance meant the researchers could design a discussion guide that included prompts relating to this topic.

Other learnings from the 2008 report relate to perceived problems with subtitle accuracy and delays, which helped to inform the design of the qualitative discussion guide. Armed with this information, the qualitative researchers included relevant prompts to the guide relating to accuracy and speed. The prompts were designed to be objective and not lead the participants in one way or another.

In 2015 Action on Hearing Loss launched their Subtitle It! Campaign to call upon government to change the law in relation to the provision of subtitles relating to on demand services and films. As a result of pressures from this campaign, in February 2017 the government passed an amendment as

⁹ Action on Hearing Loss: Subtitle it! Progress on pause: spelling out the case for subtitles on on demand services

¹⁰ RNID: Annual Survey Report 2008

part of the Digital Economy Act¹¹ promising new powers to Ofcom, to set on demand subtitle quotas for broadcasters, along with requirements for signing and audio description.

Sense

Sense is a national charity supporting those who are deaf, blind and have sensory impairments or complex needs relating to sensory impairments. A report accessed via the Sense website published in 2010¹² helped to inform the design of the quantitative study and anticipate problems relating to the participation of certain groups such as older people. The report claims that respondents with co-occurring hearing and vision impairments may not view themselves as having a disability, particularly older people who can view their difficulties as being age related and consequently find themselves screened out of recruitment processes. Armed with this information, introductions to all parts of the research programme were carefully worded to ensure relevant people were not screened out of this research.

Royal National Institute of Blind People (RNIB)

Royal National Institute of Blind People (RNIB) is a UK charity offering information, support and advice to almost two million people in the UK with sight loss. Learnings gleaned from a paper published by RNIB in 2015¹³ was useful for the design of the qualitative element of this research. A key point made by the RNIB is that there is a huge variation in the experiences and views of blind and partially sighted people. This influenced the number of ethnographic sessions carried out. The qualitative phase was designed to ensure enough sessions were conducted across a wide-ranging sample of participants with hearing and visual impairments to capture as many of these variations in experiences and views as possible.

Ofcom

Ofcom, the government-approved regulator for the broadcasting and telecommunications industries, carried out research in 2013¹⁴ which noted that although speed of subtitling could create issues for those using them, this must be traded off against the need to reduce the delays relating to the speech within programmes. This information helped to inform the design of the qualitative research discussion guide by ensuring prompts relating to the speed of the subtitles were included.

¹¹ <https://www.actiononhearingloss.org.uk/SubtitleIt.aspx>

¹² Centre for Disability Research: estimating the Number of People with Co-Occurring Vision and Hearing Impairments in the UK 2010

¹³ RNIB: My Voice 2015 Summary. The views and experiences of blind and partially sighted people in the UK

¹⁴ Ofcom: measuring the quality of live subtitling October 2013

Appendix 2 – Sample information

Quantitative sample

The following tables show the sample sizes among these key groups of interest including boosts among those with sight/hearing impairment.

Sample sizes achieved among nationally representative sample of UK population aged 16+ years:

KEY SUBGROUPS FOR ANALYSIS		Incidence	Sample Size
Total - UK Adults 16+		100%	2302
Sex	Male	48%	1094
	Female	52%	1208
Age	16-34	31%	710
	35-64	42%	970
	65+	27%	622
	75+	13%	298
SEG	ABC1	24%	544
	C2DE	53%	1214
	AB	20%	462
	C1C2	47%	1073
	DE	33%	767
Nation	England	78%	1786
	Scotland	8%	181
	Wales (including boost wave)	9%	198
	Northern Ireland (including boost wave)	6%	137

Sample sizes achieved among those with visual/ hearing impairment (including boost waves):

Variable		Incidence	Sample Size
Total - UK Adults 16+ with sight and/or hearing impairment		100%	893
Gender	Male	50%	450
	Female	50%	443
Age	16-34	9%	79
	35-64	28%	248
	65+	63%	566
SEG	ABC1	41%	363
	C2DE	59%	530
Nation	England	83%	740
	Scotland	10%	86
	Wales	7%	63
	Northern Ireland	0%	4

Data for the UK nationally representative survey are weighted to be representative of the UK population age 16+ years. Data from the boost among those with hearing and/or sight impairment are not weighted. This is as a result of there not being a primary source that reliably provides a definitive representative profile of those with hearing/ visual impairments for weighting.

Qualitative sample

The sample structure achieved is detailed below:

Figure 18: Demographic profile of participants

	Variable	Number of interviews
Gender	Male	13
	Female	10
	Total	23
Age	9-13	2
	18-24	1
	25-34	2
	35-44	6
	45-54	6
	55-64	1
	65 +	5
	Total	23

Figure 19: Location quotas

	Variable	Number of interviews
Location	England	13
	Scotland	3
	Wales	4
	Northern Ireland	3
	Total	23

Figure 20: Impairment and severity quotas

Variable		Number of interviews
Impairment	Visual	5
	Hearing	17
	Both	1
	Total	23
Severity	Profound	6
	Severe	12
	Moderate	3
	Mild	2
	Total	23