



People with hearing impairments and communications services

A study into people with a hearing impairment and
their experience of communications services

Annex 5

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Chapter 1

Introduction

Under the Communications Act 2003 Ofcom must have regard, in performing its duties to the needs of persons with disabilities, of the elderly and of those on low incomes.

As part of its regard Ofcom publishes the Consumer Experience Report. This is the second annual report of the Consumer Experience in relation to telecoms, the internet and digital broadcasting. The report lists the full results of our research programme aimed at measuring how well consumers have fared over the past year in respect of these services.

In response to stakeholder feedback from the first report in November 2006, this report presents quantitative data on consumers with hearing, visual and/or mobility impairments. Additionally Ofcom have commissioned a qualitative study to gain in-depth insights into the communications experiences of consumers with a hearing impairment.

Please note, whenever 'consumers' are referred to in this report 'consumers with hearing impairments' should be assumed: direct reference to hearing impairment is only made to highlight a point of comparison and/or for the sense of the report.

Chapter 2

Executive summary

Take-up and use of communication services

- There was general agreement that communications services have improved in recent years for people with hearing impairments, but many respondents felt there was still more that could be done.
- Many people with hearing impairments kept their personal use of fixed-line telephony to a minimum, due to the focus of this device on voice-based communication.
- Mobile telephony, with its focus on text-based communication, was felt to have changed the lives of many people with a hearing impairment, and enabled them to communicate using a convenient, mainstream method.
- If mobile telephony has changed the lives of people with hearing impairments, the internet has revolutionised them.
- Many people talked about using the internet to help them in their daily lives (for example online shopping, visiting chat rooms), and in some cases believed they used it more than the general population.
- However, there were significant barriers to take-up and full use of the internet, especially among older consumers and those from the DE socio-economic groups.
- These barriers were:
 - affordability; and
 - lack of confidence in using new technology.
- Television played a crucial role in many peoples' lives, especially older consumers, and compromises were being made in terms of how they watched it. For example, some people could not hear certain programmes because they didn't like to turn the volume up too high as it disturbed their family.

Making communications devices and equipment mainstream and accessible

- There was relatively low awareness of what specialist equipment was currently available. The low level of awareness is not surprising considering many consumers with mild/moderate hearing impairments felt that mainstream devices/equipment should meet their needs.
- Respondents discussed wanting devices or equipment that did not draw unnecessary attention to their hearing impairment and/or disrupt the experience of their hearing friends and family.
- Although subtitling was widely used and highly valued, some issues were identified – it was perceived to be of lower quality on digital television, and there were general quality issues around live subtitling, relating to spelling mistakes, accuracy, speed and synchronisation.

Providing communications information and support

- Respondents felt that awareness should be raised about the equipment and aids available, as well as what consumers should consider when purchasing specialist or mainstream equipment.
- Suggestions included:
 - clear labelling of products and services in terms of how they meet the needs of consumers with hearing impairments
 - training of call centre and retail staff, to enable them to communicate with customers who have a hearing impairment.
 - systems such as type talk in call centres, that customers can easily access without having to go through a full automated menu; and
 - provision of training to people with hearing impairments with specific focus on effective use of the internet and SMS.

Assistance schemes

- There was low awareness of existing assistance schemes to help people with hearing impairments to use or access communications services.
- Respondents were interested in assistance schemes that might help a person with a hearing impairment; their main focus was the availability of financial support for purchasing equipment and for the required training to optimise its use. There was also interest in networking opportunities, and the availability of services such as lip-reading classes.

Differences across the sample

- Children and young people in the interviews talked about taking up text-based communication more than other children/young people, due to the specific social/functional benefits that text offers them.
- However, there were also indications from the research that, despite take-up, (pre-lingual¹) profoundly deaf children/young people could also feel excluded from text-based communication. Some of these consumers commented on their:
 - inability to understand phonetically based text and therefore lack of ability to communicate with their hearing friends; and
 - low level of reading/writing skills which could make all text-based communication long-winded and onerous; as well as rendering some content, particularly that on the internet, inaccessible.
- **Consumers with mild/moderate hearing impairment** who did not necessarily overtly acknowledge their hearing impairment and/or were not doing anything, or not very much, to overcome any barriers to access to communication services. These consumers were very focused on adapting their mainstream devices to optimise

¹ Someone who was born deaf or became deaf before they learned a spoken language

usage. They might be open to acquiring additional equipment to help them with this but preferably from a mainstream supplier.

- **Consumers with severe/profound hearing impairment** who were much more likely to be already doing something about overcoming barriers to access to communication services, using specialist equipment and aids. These consumers (especially those under 60) were focused on getting equipment that was discrete, stylish and tailored to their needs. They also made optimal use of subtitles. Like those with mild/moderate hearing impairment, they were keen to get access to devices, equipment, aids and support through a wide range of channels
- **Members of the Deaf community** who were often prelingual and used specialist equipment and aids as a primary means of communication: these consumers were much more focused on issues such as improving society's awareness of hearing impairment and of the Deaf community. They wanted more Deaf role models in broadcasting, and better availability of specialist aids such as type talk, signing and subtitles. These consumers were also in particular need of reassurance that any assistance would be properly geared to their needs.
- Socio-economic group and age are important factors in consumers' levels of confidence with technology, particularly the internet. Older consumers from the DE socio-economic groups were less likely to be enjoying the full benefits offered by text-based communication, especially SMS and email, or the wider range of functions available on the internet.
- Cost was a particular barrier for retired/unemployed consumers from the DE socio-economic groups.

Chapter 3

Objectives and methodology

3.1 Objectives

The main objectives of the study were to:

- Understand how respondents with a hearing impairment use communications services in their daily lives.
- Investigate awareness of various communications services and their benefits, as well as specific services for the hearing-impaired.
- Identify any problems respondents are experiencing with accessing and using communication services (fixed-line, mobile, internet and television).
- Explore ideas for overcoming barriers to access and use.

In addition to this, the study sought to:

- Investigate awareness and understanding of specialist aids such as DVD subtitles and captioned telephony.
- Identify what mainstream and specialist equipment consumers use, or have adapted to their needs.
- Identify what information these consumers seek and what information sources they use when switching providers or finding out about services and costs.
- Identify whether current assistance schemes meet communications needs.
- Investigate whether higher take-up of technology among younger people in general is reflected among younger people who have a hearing impairment.

3.2 Methodology

A qualitative approach was felt to be most appropriate for this study as it is the most suitable approach for exploring potentially personal and sensitive issues. In addition, given the lack of prior research on people with hearing impairments and their use of communications services, a qualitative approach allows the researcher to uncover and explore issues in a way a quantitative approach cannot. Also, the low penetration of people with each level of hearing impairment among the general population makes it difficult to achieve the large samples required for quantitative research.

The majority of the research was conducted via in-depth interviews. However, where appropriate, a number of in-depth paired and three-way interviews were carried out with younger members of the sample. This was done for the comfort of the respondents, and to help the respondents explore issues together. The venue for each interview was decided on by the respondent(s), but was typically at home or in school.

Overall, the research comprised of 55 in-depth interviews with people with hearing impairments, of which:

- 40 were one-to-one in-depth interviews;
- six were paired in-depth interviews; and
- one was a 'triad' in-depth interview.

Fieldwork was conducted in June and July 2007.

The comfort of the respondent was a priority for all interviews. Communication support and assistance, that the respondent normally used, was provided where required. Whenever relevant and appropriate questions were provided in a simple written format to aid communication.

Before the interviews, respondents were asked to keep a diary of their usage of communication services. This was then used in the interview as a prompt. The interview topic guide was structured to cover:

- Introduction and review of the diary;
- Take-up of communication services by platform;
- Use of communication services by platform;
- Use of specialist aids/equipment;
- Awareness and use of converged media;
- Awareness and use of assistance schemes;
- Awareness and satisfaction of suppliers;
- Switching supplier – awareness of, and whether ever done it/considered it;
- Awareness of consumer rights;
- Practical suggestions for improvements to communications services to overcome take-up and access issues.

3.3 Recruitment

The sample was recruited using a questionnaire administered by people living in local communities who used a variety of recruitment methods to find the specified respondents. This included free finding respondents, advertising in local venues and approaching appropriate local and national service providers.

3.4 Sample structure

The sample represented the following groups. An explanation of why each group was included follows below:

- levels of hearing impairment;
- types of onset of hearing impairment;
- technology 'embracers';

- 'switchers';
- UK nations;
- urban, suburban and rural locations;
- gender mix;
- socio-economic groups; and
- ethnic minority groups.

The research fully acknowledged that consumers' experiences of communication services vary by level of hearing impairment. This was a key focus of the research design, and consequently, respondents were recruited according to level and type of hearing impairment. Four levels of hearing impairment were specified, as defined by the RNID; these were: mild deafness; moderate deafness; severe deafness; and profound deafness.²

As not all people who have a hearing impairment would classify themselves as such, questions asked in the recruitment process were phrased to be sensitive to this. Respondents were first asked a list of qualitative questions relating to, for example, whether their friends/family often had to repeat things for them, and whether they had trouble following conversations in group settings. If they agreed with any of these statements, they were then asked if they had been diagnosed with a hearing impairment. The level of hearing impairment was classified (for those who had been diagnosed) by the decibels they could hear; while for those who had not been diagnosed, their level of hearing impairment was self-classified.

The respondents comprised people who had been born with a hearing impairment and those who had become hearing-impaired later in life; and also a mix of people who had had gradual and sudden onset of impairment.

The focus of this particular research was on understanding communications usage and barriers to usage related to hearing impairments. For this reason we screened out respondents whose main reason for not taking up various communications services was cost. We do acknowledge that some disabilities may act as barriers to access to work, and that some people with disabilities may be on low incomes as a result.

To ensure that there was a good spread of attitudes to communications services, respondents were asked whether they agreed with three attitudinal statements on technology; and a quota was set on those classified as 'embracers' (as seen in annex 3). Additionally, people were asked whether they had ever switched a communications service provider in order to include some consumers who were empowered in the communications market.

The sample represented all UK nations, an urban/suburban/rural split, genders, socio-economic groups and ethnic minority groups.

All interviews were conducted by thepeoplepartnership, a market research agency with specialisms include socially excluded people research as well as business and public sector research.

² <http://www.rnid.org.uk/>

Chapter 4

Take-up and use of services

4.1 Introduction

This chapter covers:

Take-up and use of communication services

- An exploration of take-up levels of communication services and how people are using these services.
- The barriers to take-up and use of communications services in general, as well as of specific devices.

Equipment and aids

- The extent to which consumers adapt their mainstream equipment, their use of specialist equipment and aids, and the barriers that inhibit people's use of these aids to enhance their experience of communication services.

Switching

- The level of switching suppliers among consumers, motivations for switching and consumers' information requirements.

4.2 Overview of key findings

4.2.1 Take-up

- Most respondents had taken up and/or had access to fixed-line telephony (even if others in the house were using it on their behalf, at least some of the time).
- Take-up of mobile telephony was highest among those under 45, due both to its mainstream appeal and the specific relevance of SMS to those with hearing impairments. It was lower among the older group, especially those over 60, and in the DE socio-economic groups. Reasons given for low take-up among this group were: cost (typically, they already had and claimed to prefer fixed-line); inertia/lack of interest; lack of confidence with technology and specifically SMS; lack of (perceived) compatibility with hearing aids; and perceptions/experiences of poor sound quality.
- Take-up of the internet was highest among those from the AB socio-economic groups across the sample; and lowest amongst those over 60 in the sample especially those from DE socio economic groups. Key barriers to take-up of the internet amongst these groups were cost and confidence.
- All in the sample had access to television and barriers to take-up of television were largely related to lack of take-up of digital, rather than any, television. Reasons given for not having digital television largely related to lack of interest; a few people perceived they lacked access due to geographical location, although this was not necessarily the reality. A minority of people also claimed not to be interested in taking up digital television because they perceived the subtitling to be of a lower quality.

- Many consumers with a hearing impairment were positive about the idea of using one supplier for multiple services for reasons of reduced cost and convenience.

4.2.2 Usage

- Overall, people felt that developments in communication services had been extremely positive for those with hearing impairments and that these developments had significantly enhanced their lives.
- The use of text as a mainstream communication method was specifically highlighted by many as a critical development, because it is both mainstream and suited to the specific needs of those with a hearing impairment.
- Text was, however, perceived by some of those who were more dependent on it to have the disadvantage of lacking an emotional dimension. It was for this reason that some consumers were eager to also have access to services such as video relay (although these services were currently felt to be too costly and of not sufficiently high quality).
- Usage of fixed-line telephony has to a degree been superseded by mobile telephony offering text-based communication for many with hearing impairments. However, it was still valued by many consumers; those over 60 especially valued fixed-lines, and were more positive about type talk, although the majority did not have this service.
- The internet was perceived as an extremely important, possibly the most important, development in communication services, by those who used it. Users claimed it had transformed many aspects of their lives, reduced the unpleasant aspects of communicating with a hearing impairment and increased the quality and extent of other communication.
- People with hearing impairments, especially those under 25, liked the idea of more of their communications needs being channelled through the internet. These included being able to download television programmes and watch them at their leisure or make a telephone call and be able to see the person at the other end.
- Despite enthusiasm for the use of the internet as a single 'hearing-impaired friendly' platform, there were also significant concerns that more and more complex technology would become increasingly inaccessible to those with hearing impairments.
- Many made the point that they would prefer the focus to be on simplification and development of equipment/technology specifically for the hard of hearing and deaf, rather than on increasing complexity or sophistication.
- However, non-users of the internet, especially those over 60 and those from the DE socio-economic groups, who typically did not use it for reasons of cost and/or confidence, were notably excluded from these advantages.
- Television was seen as a critical window onto the wider world by many consumers across the sample, but especially those who found everyday communication more stressful as a result of their hearing impairment, and the oldest consumers, many of whom were relatively housebound.

4.2.3 Equipment and aids

- There was relatively low awareness of, and engagement with, ways of adapting mainstream devices to the needs of those with hearing impairments as well as how to use additional mainstream or specialist equipment and aids currently on the market.
- Many people with hearing impairments claimed they would prefer to have mainstream devices and equipment with the features and functions they need rather than specialist equipment provided by specialist suppliers.
- Text phones were perceived to have significant benefits by some consumers over 60. However many younger consumers felt that, with the advent of SMS and services like type talk, text phones had lost relevance.
- There was an overall recognition that subtitles had improved but that they (and especially live subtitles) could improve still further. Specific criticisms related to spelling, omissions, speed and lack of synchronisation.
- There was a very positive response to, and high awareness of, DVD subtitles.
- Type talk was considered an excellent service by those who used it. Reflecting the overall desire of the sample for equipment/aids to be more mainstream, some consumers requested that a mainstream supplier offer this service in the future.
- There was only very low awareness of caption telephony, although there were high levels of interest in it as a potential service (provided it could be offered at a reasonable cost).
- There were high levels of theoretical interest in video relay, but concerns about cost and quality.
- Signing was criticised by people who used it as not being available on a wide enough range of programmes or at accessible times of day. There were also criticisms that the quality of signing on programmes was not good enough, with specific requests for more deaf signers.

4.2.4 Switching

- This research indicated low levels of switching among those with hearing impairments and revealed that the switching that does occur results from dissatisfaction; for example with call centre service and text-based tariffs, rather than being the result of a proactive search for the best service or deal available in general or for those with hearing impairments.
- There were consistently high numbers of requests for communications service providers to offer more services specifically for those with hearing impairments and for all such services (both existing and new) to be promoted more overtly.

4.3 Take-up of communication services

There was little evidence from this research that take-up of each of the individual communication services was significantly reduced by an individual's hearing impairment.

Affordability did emerge as a significant barrier for some consumers. This may be at a higher level than reported here, as our sample was recruited on the basis of screening out consumers who had not taken up more than one communication service for reasons of cost. Indeed, it is widely acknowledged that some disabilities may act as barriers to access to work, and, due to this, some people with disabilities may be on low incomes as a result.

The key barriers to take-up discussed were general rather than hearing-specific, although they may have been exacerbated by a person's hearing impairment. They included cost, inertia, lack of interest, lack of perceived need and lack of confidence with the technology.

There were also hearing-impairment specific barriers to access which had an influence on take-up, although these did seem less important than the more general barriers. Hearing-impairment-specific barriers included:

- help lines giving support with take-up were criticised as being impossible to use by those with more severe/profound hearing impairments; and
- the high cost of the specialist equipment/aids necessary to adapt communication services to their needs was, on occasions, felt to be an inhibitor to take-up.

More specifically, the extent and nature of barriers to take-up varied by device, as detailed in the remainder of this section.

4.3.1 Fixed-line telephony

Most people spoken to had access to fixed-line telephony, even if others in the house were using it on their behalf (at least some of the time).

A minority of younger consumers, typically those under 25, claimed they did not have a fixed-line at home but they did have a mobile. The reasons they gave for this were related to a belief that mobiles were more relevant to their (hearing impairment) needs and their lifestyles, combined with a belief that it was easier to control the cost of mobiles than fixed-line telephones (this was especially true for low-income consumers³):

'I don't use the [fixed-line] phone but I text all the time – it's not too expensive although it could be cheaper' (18-24, profound hearing impairment)

A minority of people with the most severe/profound hearing impairments also claimed not to have taken up a fixed-line telephone. Reasons given for this were two-fold:

Firstly, consumers reported usage difficulties relative to other more text-based communication services. These consumers typically reported having taken up other, more text-based communications services (such as mobile phones or the internet) in preference to fixed-line. There is evidence from this research that there is a movement among these consumers away from fixed-line and towards other communication services which better suit their needs.

³ These findings are consistent with separate research conducted among low income consumers (see Annex 6)

Secondly, consumers reported that the prohibitive cost of specialist equipment and aids to facilitate usage, for example text phones and caption telephony, affected their use of fixed-line services.

4.3.2 Mobile

Take-up of mobiles was generally high across the sample but especially among those aged under 45.

Indeed, many of these consumers felt that their take-up may be higher than their hearing peers, due to the mainstream appeal of the mobile, its SMS focus and its portability, all of which were felt to be benefits of particular relevance to those with hearing impairments.

However, take-up of mobile telephony tailed off among older consumers, especially among those over 60 in the DE socio-economic groups (consistent with findings for the general population).

A large number of barriers to take-up emerged among this group, including:

- a perception that mobiles were expensive (especially given that many of these consumers also had access to a fixed-line telephone);
- inertia and lack of interest, often due to there being no perceived need, especially since these consumers were particularly likely to have a fixed-line phone;
- a lack of confidence with the technology and specifically SMS;
- perceived lack of compatibility with hearing aids; and
- general perceptions or experience of poor sound quality.

'I'd never use one of those I'd have to take my hearing aid out which would mean taking my hair net off and then I'd drop my hearing aid and that would be that' (70+, severe hearing impairment)

'I don't bother to take my hearing aid out for a short call it's too much hassle but I would for a longer one' (70+, moderate hearing impairment)

'Why would I bother – the other telephone works and I'm not going to start using text at my age!' (70+ moderate hearing impairment)

4.3.3 Internet

As with mobile phones, take-up of the internet was relatively high across the sample. It was highest among those in the ABC1 socio-economic groups, and lowest among those over 60 and in the DE socio-economic groups.

Many of those who had the internet at home commented that they perceived fewer hearing-impairment related barriers to take-up for the internet than for all the other communications services. This was because the internet was perceived to be more focused on text and not as focused on audio as the other communication services.

Barriers to take-up of the internet among the older group and those from the lower socio-economic groups were much more likely to be general rather than hearing-impairment specific. Key reasons given for not being on the internet included:

- lack of awareness of the different elements of cost involved and a perception that getting on the internet and using a PC would be expensive;
- lacking confidence with the technology;
- inertia/lack of recognition of the potential benefits to them and their lives; and
- lacking access to the internet among others in their social group (and therefore lack of ability to use email to communicate with their friends/family).

4.3.4 Television

All in the sample had access to television and barriers to take-up were largely related to digital TV, rather than TV itself.

Reasons given for lack of take-up of digital television were mostly related to perceived lack of access due to location.

A minority of people also claimed not to be interested in digital television or multichannel television because they perceived the subtitling to be of lower quality than on terrestrial television, especially on the commercial channels.

4.3.5 Bundled services

Bundling is where more than one service is supplied by the same provider and the cost of the package of services is often linked to a discount or special deal. For example, a fixed-line and broadband service is often offered as a bundled package.

Similar to consumers in general, the consumers in this sample were generally positive about the idea of using one supplier for multiple services; listing perceived benefits such as reduced cost, simplified bills and less hassle.

4.4 Use of communication services

People felt that developments in communication services had been extremely positive for those with hearing impairments and many felt that these developments had significantly improved their lives.

Things are looking really rosy now compared to in the past! (45-59, profound hearing impairment)

The benefits talked about were wide-ranging and included:

- a positive emotional effect on peoples' lives, such as feeling more fulfilled, increased confidence and self esteem;
- enhanced extent and quality of social communication with immediate friends/family, and easier communication with a wider social group;
- increased feelings of safety and security;
- facilitating personal business such as shopping, buying tickets and banking; and
- making it easier to compete on an equal basis in the workplace.

Many of these benefits were text-related and meant that the need for embarrassing verbal communication was removed.

More specifically, different people used different text services depending on age, severity of their hearing impairment, socio-economic group and the role they wanted the text function to fulfil, for example:

- younger people were more likely to be using SMS or instant messaging (IM); older people were more likely to be using text phone, minicom and fax; while email and SMS were prominent across all age groups;
- people with severe/profound hearing impairment were more likely to be using SMS/type talk/fax and subtitles (although there was evidence of use of the latter across the sample); and
- people talked about using more formal (expensive) forms of text communication, such as text converters, for important, professional and educational purposes.

Some consumers with a severe/profound hearing impairment said they thought they used SMS more regularly than their hearing peers.

However, there was also some concern that easier text-based communications can lead to people with more severe/profound hearing impairments avoiding inter-personal communications and thereby losing these skills.

It's a temptation to just use the internet – it's so much easier than trying to communicate with people' (18-24, profound hearing impairment)

4.4.1 Fixed-line telephony

Fixed-line telephony has to some extent been superseded by mobile telephony, which offers text-based communication with its advantages for the hearing-impaired, but it was still felt to

be an important service for many consumers, especially those aged 60+. Fixed-line usage has been enhanced for these consumers by additional equipment and aids such as text phones and type talk, although in many cases, these are still little known and/or felt to be too expensive.

Many respondents, especially those with severe/profound hearing impairments, felt that fixed-line, with its focus on voice communication, had a necessarily limited role in their lives. People with hearing impairments told numerous stories of using a fixed phone and associated it with memories of embarrassing or uncomfortable voice-based failures of communication.

Many either totally avoided, or minimised their personal use of the fixed-line telephone. Typical methods of achieving this included:

- restricting use of the fixed-line per se: never making outgoing calls and only receiving incoming calls in exceptional circumstances when no one else was around, limiting the length of the call, and only making essential/emergency calls;
- restricting use of the fixed-line to making/receiving calls from a small circle of family and friends; and
- cutting calls short as soon as hearing difficulties are encountered.

It was very common for these consumers to delegate responsibility to others to make and receive calls on their behalf; for example, handing the receiver immediately to another person on picking it up.

Some users were also adapting their existing equipment by employing practical solutions such as putting the phone on speaker phone; having multiple phones, one in each room; using a flashing light as an alerter; turning up the volume or carrying a portable handset around with them so they could hear the ring (although the sound quality was not perceived to be as good).

Other problems encountered were some hearing aid users claimed to experience discomfort when using the fixed-line in conjunction with their hearing aid. Those with more severe/profound hearing impairments made less use of text phones/minicom as well as type talk.

'They ring me, I never ring them' (18-24, moderate hearing impairment)

'I only speak to people I know well on the telephone' (25-44, severe hearing impairment)

'I cut calls short if I am having a bad day' (25-44, moderate hearing impairment)

'I dread using it' (60-70, severe hearing impairment)

'I always hand it to my wife' (70+, moderate hearing impairment)

4.4.2 Mobile

Mobile telecoms, and especially SMS, were perceived very positively and viewed as an important step towards communicating on an equal basis with others, especially among young people with severe/profound hearing impairments.

Consumers with hearing impairments liked using mobiles, and particularly SMS, because mobiles feel mainstream, inclusive and modern, and at the same time provide a hearing-impairment-specific aid to communication. Many consumers across all age groups, and especially those with severe/profound hearing impairments, were extremely positive about, and reliant upon, the SMS function on the mobile.

The most frequently mentioned benefits of mobiles related to the feeling of freedom and independence that a mobile provides, both on an emotional level, and, especially for those with severe/profound hearing impairment, at a practical level. In discussing the functional advantages, some consumers talked about the enormous relief they feel now they can carry a mobile and know that it will always be possible to use SMS to contact someone in a way that was just not possible in the past. Portability is clearly an advantage for all users of mobiles but it is critical for those with hearing impairments, who may in the past have felt unable to go out on their own, or for those for whom contact on the move was a major challenge.

Other benefits discussed related to an enhanced social life and, especially in the case of workers with jobs like driving and sales, better communication with work.

'I text all the time – not all my friends have access to email but everyone has SMS – we use it as if we were speaking to one another' (15-17, profound hearing impairment)

'Everyone uses it, it means you don't feel left out as you can use text just like everyone else' (15-17, moderate hearing impairment)

'My boss can text me in the van – it's made a real difference – before he couldn't contact me easily using the [fixed-line] phone' (45-59, moderate hearing impairment)

'I just feel much safer now I can carry a mobile around with me and text to keep in contact' (45-59, profound hearing impairment)

As with fixed-line phones, many of the respondents with severe/profound hearing impairments avoided the voice function on their mobile phones. Indeed, problems with voice telephony were felt to be often worse on a mobile due to inferior sound quality and incompatibility with hearing aids.

Although, overall, SMS was very positively perceived, there was some indication from the research that very heavy users with severe/profound hearing impairment, especially teenagers and young adults, were experiencing text fatigue. These consumers did talk a bit about the downsides of SMS such as conversations being very stilted, taking longer and lacking emotional content. This was especially true for the pre-lingual consumers who were unable to use phonetic text and for whom reading/writing takes longer to execute and process.

'Text does take longer; we're not that good at reading and writing as well that makes it worse' (15-17, profound hearing impairment)

'Sometimes you get frustrated – a conversation can take forever and it's not the same as seeing a signer they put more expression into communicating' (18-24, profound hearing impairment)

Some of the older consumers in the sample were resistant to using SMS, sometimes in spite of knowing the obvious benefits to them.

There was evidence that functions which allow for non-verbal communication on the mobile; pictures and videos were being used by a significant proportion of those with hearing impairments, especially those aged under 25. These functions were felt to have the potential to add a valuable extra layer of non-verbal communication which can be lost with extensive use of SMS. However, it was generally felt that the cost of these visual functions, combined with their relatively low quality, meant that they were used only occasionally and that people with hearing impairments were not fully benefiting from them.

Some complained about not being able to hear the ringtones on mobiles for reasons of both volume and tone. A few were using the vibrate mode to overcome this problem and several requested more 'hearing-impairment friendly' ringtones as the obvious solution.

It was pointed out that flip mobile phones were easier for deaf/hard of hearing children to use due to the mouth and ear piece being at same level and there were requests for more of these.

There was interest in, and some use of, mainstream Bluetooth equipment as a means of enhancing the sound quality for those with hearing impairments when using the mobile. However, this equipment was criticised for its high cost.

4.4.3 Internet

The internet was perceived as an extremely important - possibly the most important - development in communications services by those who used it. Users claimed it had transformed many aspects of their lives, reduced the unpleasant aspects of communicating with a hearing impairment and had increased the quality and extent of their other communications.

Perceived benefits of the internet were wide ranging and included:

- boosting confidence, providing contact with a wider range of people;
- providing a much greater sense of 'a level playing field' and equal contact between the hearing and those with hearing impairments;
- avoiding or minimising embarrassing voice communications, due to a greater emphasis on text;
- a greater sense of control and being able to communicate in one's own time (relating to functions like email and VOD television);
- facilitating personal business which might otherwise be problematic; and
- an important aid in the workplace.

'The internet is the most important technology for me, because you can be productive on it' (18-24, moderate hearing impairment)

'Before the internet I didn't do anything. God bless Bill Gates! It's opened up the world to me' (70+, moderate hearing impairment)

'email has transformed my life' (60-70, severe hearing impairment)

'I think I use it more than my hearing friends – it's a temptation to be on it all the time' (15-17, profound hearing impairment)

Conversely, older consumers from the DE socio-economic groups emerged as less likely to use the internet and more likely to experience general barriers to use such as cost, inertia and lack of confidence in using technology.

Among many of those who used the internet, there was wide use of internet functionality, and in some cases users with hearing impairments believed they used the internet more frequently, and in a wider variety of ways, than the general population. Specific functions used varied by age of consumer; under 25s were more likely to use functions like social networking, IM, games, downloading music and watching television. All users talked a lot about email and many highlighted the benefits of being able to conduct personal business and shopping over the internet. Specific examples given were buying tickets, banking, dealing with utilities companies and paying bills.

Hearing-impaired internet users reported that, in contrast to other communications services, they could use the internet without needing any additional aids. The only exceptions to this were some people who were profoundly deaf, who reported using the signcommunity.org.uk website to help them convert text to signing.

There was a mixed reaction from consumers regarding video on demand, user-generated content and visual stimuli in general. Consumers mentioned the emotional benefits of being able to see the content, or their friends and family, via webcam, even if there were problems with the sound quality.

I like to look at photos on the internet...and I video call to my son in Israel li find it hard to hear them but it is fun to see the children' (70+, mild hearing impairment)

'Communication isn't just verbal – there are subtle cues which you can pick up if you can see someone even if you cannot properly hear them (25-44, severe hearing impairment)

'If you download stuff on the internet the quality is not that good and the sound is not good' (25-44, severe hearing impairment)

4.4.4 Television

Use of television was seen as a critical window onto the wider world by many consumers across the sample, but especially consumers who found everyday communication more stressful due to their hearing impairment and by the oldest consumers, many of whom were relatively housebound. Benefits included stress release, social contact and access to the outside world.

Its stress release and relaxation especially if you have had to communicate with people verbally during the day' (45-59, profound hearing impairment)

'I put the television on for company really in the evenings' (70+, severe hearing impairment)

'A window on the world – I put the news on and read the subtitles' (60-70, severe hearing impairment)

All watched television programmes; consumers aged over 50 were using teletext; and some older women from the DE socio-economic groups were using the shopping channels. Teenagers and young adults, especially boys, used the television for playing games.

However, there was some evidence that teenagers and young adults with access to the internet at home were watching television less and spending more time on the internet instead.

I use the internet a lot more than I watch television – that’s partly because there is more to do on the internet and partly because I find it difficult to watch television – I don’t want to use the subtitles or wear headphones and turning it up loud disturbs people’ (25-44, severe hearing impairment)

There were lots of examples, especially among consumers with mild/moderate hearing impairments, of people ‘making do’ rather than using additional/specialist equipment to enhance their experience of television. Typical scenarios included turning the television up very loud; adapting the tone; watching but not hearing; and asking friends/family to tell them what was happening.

‘I’m alright love I get along – I can’t hear the television but I watch it and read the review in the Radio Times’ (70+, severe hearing impairment)

A minority chose television sets with features that met their hearing needs, for example surround sound or a wide volume range. However, many of those with mild/moderate hearing impairment did not do this, because they did not know what options were available to them. Where the household decision maker did not themselves have a hearing impairment, they too tended not to know what options to consider or what was available.

Some consumers claimed to be using additional equipment, such as a microphone plus headphones or a hearing loop, to help them hear the television, but there were high levels of dissatisfaction with such equipment. Common criticisms included that it was too obvious and/or unsightly.

There was evidence of use of subtitles across several levels of hearing impairment. Many of those with mild/moderate hearing impairment claimed to use subtitles occasionally, while those with more severe/profound hearing impairment tended to use them all the time.

A minority of those with severe/profound hearing impairment used signers on television, either as their sole means of support or in conjunction with subtitles.

4.4.5 Convergence

The term convergence often refers to two different functions. One is the ability to access several services from one platform, such as making phone calls, watching video content or television and accessing internet content, all via the internet. The other is being able to use many platforms to carry out the same task, such as making phone calls via fixed-line, mobile or the internet.

People with hearing impairments, especially those under 25, liked the idea of more of their communication services being channelled through the internet.

The internet, rather than other devices, was the preferred platform for delivery of multiple services to those with hearing impairments for a number of reasons including:

- the focus on text as the basis for communication;
- the facility to download content, which allows users to rewind if they miss anything; and
- the facility to add a visual dimension to text-based communication, e.g. using VoIP with a webcam (although this may be of greater benefit in the future when picture quality improves).

You can download television programmes which means you can rewind and listen to things again' (12-14, moderate hearing impairment)

'You can put a picture up of the person you are communicating with which makes it more involving' (25-44, severe hearing impairment)

By contrast, there were concerns about using a mobile phone as a multi-purpose platform, due to perceptions that this would reduce accessibility for those with hearing impairments. Key concerns with converged mobile services focused around:

- poor sound quality; and
- the smaller screen reducing the likelihood of those with hearing impairments being able to do things like lip read, read subtitles and see signers.

Despite enthusiasm for the use of the internet as a single 'hearing-impaired friendly' platform, there were also significant concerns that increasingly complex technology would become progressively more inaccessible to those with hearing impairments. Many also made the point that they would prefer the focus to be on simplification and development of equipment/technology specifically for the hard of hearing/deaf, rather than on increasing complexity and sophistication.

'I like technology, but I also like to keep things simple' (18-24, severe hearing impairment)

'I don't feel the need to carry a computer around in my hand' (18-24, moderate hearing impairment) [on why he chose the most basic mobile phone model]

4.5 Equipment and specialist aids

This was an area where respondents felt there was room for improvement. This tended to split into one of two categories; a general need for information and for customer support during the decision-making process.

There was relatively low awareness of, and engagement with:

- ways of adapting mainstream devices such as televisions and fixed-line telephones to the needs of those with hearing impairments;
- mainstream equipment such as headphones and how this could be used to enhance the communications experience of those with a hearing impairment; and
- specialist equipment (indeed, much of the 'new' equipment suggested, such as wireless headphones, is in fact already in existence).

Many consumers across the sample, but especially those with mild/moderate hearing impairments, expressed a clear preference for being able to use mainstream devices and equipment supplied by mainstream service providers, manufacturers and retailers, rather than having to go to specialist suppliers and use specialist equipment.

Consumers complained that the reason they could not adapt their mainstream devices and/or improve their experience in using mainstream equipment was because they did not know how to; that there is no clear communication through mainstream channels of what is on offer, or how it could benefit those with hearing impairments (as well as no guidance on what features people with hearing impairments should avoid).

There were also many complaints that the customer services offered by mainstream communication service providers, manufacturers and retailers (or, indeed, by specialist pan-disability suppliers and government bodies) were not geared up to help people with hearing impairments.

The desire for mainstream equipment led to a general rejection of any additional equipment, whether mainstream or specialist that made an individual's hearing impairment obvious. For example, headphones were often rejected, at least for use in social situations such as watching television with friends and family.

Perceptions about equipment for those with hearing impairments often lagged behind reality; many respondents had an image in their mind of an ugly, overt hearing aid, even though modern hearing aids can be small and discreet.

Many complained that equipment was not sufficiently tailored to their needs; for example, headphones that cannot be tuned to an individual's tonal range.

Some were using, or wanting to use, mainstream Bluetooth equipment to enhance their hearing experience. However, this equipment was felt by many to be effective but prohibitively expensive. Interestingly, several people spontaneously commented that Bluetooth may well change negative perceptions of equipment to help with hearing loss, as it is known to be trendy.

There were consistent perceptions that a lot of the equipment available to enhance the communication experience of those with hearing loss was (too) expensive.

'I saw a really pretty girl walking past the other day – she had her hair up and I noticed she was wearing a hearing aid – I bet she wouldn't have done that a year ago before Bluetooth' (25-44, moderate hearing impairment)

'I'm tonally deaf and I'd like wireless headphones that I could tune to my own personal settings' (60-70, moderate hearing impairment)

'You don't want to stand out – imagine sitting with your friends with a pair of headphones on your head' (45-59, moderate hearing impairment)

'My mum's loop system has wires all around the room' (45-59, mild hearing impairment)

4.5.1 Hearing aids

Hearing aids were automatically the key focus of conversation for many with hearing impairments in conversations about equipment and how to optimise usage of communication services.

They were often negatively perceived, especially by younger consumers, at both a functional and an emotional level.

Hearing-impaired people (even the older group) associated hearing aids with older, disabled people. They perceived hearing aids as being aesthetically unattractive; incompatible with mobile phones; and uncomfortable to wear in conjunction with a phone or other equipment such as headphones.

These negative associations appeared to have transferred to all equipment associated with hearing loss.

'The phone is ok if I press it hard against my head' (18-24, moderate hearing impairment)

'I have to take my hearing aid out when I'm on the telephone' (70+, severe hearing impairment)

'My hearing aid is hard to wear at the same time as holding the phone' (60-70, severe hearing impairment)

'Everything is hearing aid focused what about the other gadgets that would help you enjoy television and things' (25-44, moderate hearing impairment)

4.5.2 Text phones

Text phones were perceived to have significant theoretical benefits by some consumers over 60, but many others were critical of them.

There was limited ownership of text phones, restricted to a minority of older people across the sample. It was notable that even those who owned a text phone were not necessarily using it.

Some older consumers, usually those who did not own one, claimed to be interested in the possibility of a text phone that they could use to help them in much the same way as subtitles on a television. However, many other consumers were less enthusiastic. Some criticised the look of text phones, claiming they were ugly, too overt and had undesirable image associations with age/disability and stupidity. Text phones were also felt to be expensive.

'I've had one for years but never use it' (70+, severe hearing impairment)

'Voice to text would be interesting – I would definitely use the phone more, I'd use it instead of e mail as less people have e mail' (60-70, severe hearing impairment)

'I could have it on and just check the text if there was something I couldn't hear' (70+, severe hearing impairment)

'It would be there as a prompt rather than having to use it' (45-59, severe hearing impairment)

'I did look into it but it costs a fortune' (60-70, moderate hearing impairment)

'I expect it would be really big and obvious, I'd feel really stupid with a phone like that' (25-44, severe hearing impairment)

'It's like shouting I've got a disability' (18-24, moderate hearing impairment)

'Phones with deaf devices also have big buttons it's as if they correlate deafness with being stupid' (45-59, severe hearing impairment)

'I was given one by social services free – I used to use it a lot but I use my mobile and type talk now' (45-59, profound hearing impairment)

4.5.3 Subtitles

Subtitling is text on screen representing speech and sound effects that may not be audible to people with hearing impairments, synchronised as closely as possible to the sound.

There was fairly frequent reported use of subtitles across the sample, and especially among those with severe/profound hearing impairment. There was also some resistance to the use of subtitles – arising out of a belief that if people did not use their hearing, it would get worse.

There was general recognition that subtitles were on more programmes than in the past and an overall awareness that they had improved. The overall quality of subtitles was also felt to have improved in terms of their position on screen, accuracy and use of colour.

Analogue was perceived to use more and better quality subtitles than digital television.

There were, however, criticisms of subtitles, especially related to those on live television. Specific issues included spelling; lack of precision; omission of some words such as swear words; mistakes; delay; lack of synchronisation; and positioning of subtitles over peoples' mouths so people cannot lip read at the same time (although this was felt to be less of a problem than in the past).

The lack of ability to record subtitles was commented on by some. This service seemed to vary by provider and by equipment owned.

There was also some specific criticism that subtitles are not used on many educational programmes.

'Use it, don't lose it' (25- 44, severe hearing impairment)

'Using subtitles feels like mentally giving up (ref desire to continue to use hearing)' (45-59, severe hearing impairment)

'They come in a few seconds after the presenter, I know it is difficult when it is live but they could be better' (25-44, severe hearing impairment)

4.5.4 DVD subtitles

There was a very positive response to DVD subtitles, with high levels of awareness and endorsement of DVD subtitles across the sample. However, a significant number had noted – with disappointment – that free DVDs in newspapers do not include subtitles.

4.5.5 Type talk

Typetalk is the national text relay service operated by RNID and funded by BT as part of its Universal Service Obligation. Text relay offers customers a real-time text-voice and voice-text translation run by trained operators a service enabling people with hearing and speech impairments to communicate with hearing people as a functional equivalent to voice telephony. Customers who use the relay service use a specialised terminal, a textphone, which connects to conventional telephones through the medium of the relay service.

Type talk was considered an excellent service by those who used it. Users of this service were extremely positive about it in terms of function and efficiency with several commenting that it had had a significant and positive effect on their lives.

Although type talk is a universal service that BT is required to provide, consumers do not view it as such, with some specifically requesting that a mainstream supplier offer the service.

An amazing service' (45-59, profound hearing impairment)

'My life has changed since they introduced type talk' (60-70, profound hearing impairment)

'Easy and efficient' (15-17, profound hearing impairment)

4.5.6 Captioned telephony

Captioned Telephony is a service for customers with some hearing loss who are able to use conventional voice telephony but may struggle to capture all the conversation precisely. Trained communications assistants 'revoice' the incoming conversation so that text subtitles or captions are displayed on the user's telephone with a very short delay to supplement the audio stream.

There was a very low level awareness of captioned telephony.

When told about the service consumers expressed interest but they were concerned that such a service would be expensive.

4.5.7 Video relay

Video Relay services provide real-time translation between British Sign Language (BSL) and voice to provide a functional equivalent to voice telephony for Deaf BSL users. Some users may use videophones but video relay may also be accessed using a conventional computer equipped with a webcam.

There were high levels of interest in video relay but concerns were mentioned about cost and quality.

Specifically, there were concerns that the level of quality would not be sufficient to see the signers or lip read from the video.

4.5.8 Signing

Sign language comprises the use of manual gestures, facial expression and body language to convey meaning. British Sign Language (BSL) is the most popular sign language in the United Kingdom. This is a distinct language (recognised as such by the Government) with different syntax and vocabulary from English. In addition to different forms of sign language in other countries, Sign Supported English (which tends to follow the syntax and vocabulary of English) and Makaton (a simplified form of sign language sometimes used with deaf children) are also used in the UK.

Signing appears in two forms on UK Television. Sign interpreted programmes include a Signer in the bottom right corner of the screen to translate the on screen dialogue. Sign presented programmes use BSL as the principle method of communicating a programme's content. These programmes feature Signers as presenters and often participants. Sign presented programmes are accompanied by a voiceover and usually subtitles.

A small minority of people from the Deaf community in the sample preferred signing as a means of communication. These individuals acknowledged and endorsed signing on certain programmes, most notably soaps such as Emmerdale, Coronation Street, EastEnders and Hollyoaks.

However, there were also a number of criticisms in relation to signing on television, including:

- insufficient programmes have signers, especially educational programmes;
- signed programmes are scheduled at inaccessible times, for example, in the early morning and the middle of the night; and
- some communication is lost when hearing people interpret and sign for deaf people. This would be overcome, to some extent, if more deaf people were involved in broadcasting (both deaf and mainstream) in the first place.

There's a difference between a hearing person interpreting a programme and signing and deaf to deaf communication' (15-17, severe hearing impairment)

Some complained that signed and, to a lesser extent, subtitled programmes are poorly promoted in advance, for example in television magazines.

Although not necessarily related to specific equipment or aids, there were general comments from hearing-impaired consumers on the need for the Deaf community to be involved in

programme development; both in mainstream broadcasting and in making programmes 'for deaf people by deaf people'.

'More deaf people should be involved in co-creating programme more with programme makers' (15-17, severe hearing impairment)

'There should be funding from government to increase access to programmes for deaf people' (15-17, severe hearing impairment)

'There should be more presenters who are deaf themselves' (15-17, severe hearing impairment)

'Deaf people should be on hearing programmes talking about their experiences' (15-17, severe hearing impairment)

4.6 Switching suppliers

Overall, the qualitative evidence from this research indicated that switching suppliers among hearing-impaired consumers may be lower than in the general population, due to lower confidence levels deriving from the hearing impairment.

The research also indicated that the switching that did occur resulted from dissatisfaction with services and tariffs not specifically tailored to those with hearing impairments, rather than as a result of a proactive search for the best and most appropriate service. This is similar to the general population where many consumers switch because of a problem.

Specifically, there was evidence that there is a lack of appropriate services for those with hearing impairments, most notably from call centres, and that this lack was contributing to – if not triggering – switching. For example, one respondent mentioned switching from a mobile phone operator as a result of the lack of a text-based, value for money tariff geared to his needs.

There was also evidence from the research that consumers would like be able to judge potential suppliers on the basis of the specific services each offers to those with hearing impairments, but that they felt suppliers did not currently compete on this basis, or provide this type of information.

'Call centre service is terrible from some providers – I think my experience meant I switched away eventually' (45-59, severe hearing impairment)

'I switched away because the texts were too expensive and that's what I mainly use' (18-24, mild hearing impairment)

'We changedbecause when I was getting transferred to people in India I couldn't hear what they were saying. And it was just embarrassing.' (45-59, severe hearing impairment)

'I'd look at cost, I suppose, but as far as I know they are all the same on things like subtitles, customer service, things like that' (45-59, moderate hearing impairment)

Chapter 5

Barriers to services and improving access

5.1 Introduction

This chapter covers:

Barriers to access of communication services

- The key barriers to access of communication services, both overall and in relation to each device.

Overcoming barriers

- Consumer-generated ideas relating to what they think needs to be done to remove barriers to access and to enhance their communication service experience – both overall and by device.

Assistance schemes

- Awareness and take-up of assistance schemes; consumers' experiences and requirements.

Complaints and rights

- Consumers' likelihood of complaining; their knowledge of complaints procedures and awareness of their rights.

5.2 Overview of key findings

5.2.1 Barriers to access

- The most-mentioned barriers to access were in connection with fixed-line telephony, due to its focus on voice communication.
- Although the mainstream status of mobiles, their portability and the availability of SMS were felt to be significant advantages, voice-related barriers also existed for mobile telephony. In addition, poor sound quality and incompatibility with hearing aids was also frequently mentioned. A specific barrier to mobile access among heavy users of SMS was their perception of the lack of availability of text-based tariffs.
- Barriers to access to the internet amongst non-users were largely related to cost and lack of confidence and less to do with any hearing-specific reasons.
- Barriers to access to television were focused on usage rather than take-up; all the consumers spoken to had access to TV. In addition, a number of broadcasting-related issues, such as presenters' lack of training, were raised. Subtitling and signers were felt to have improved but it was felt these services could be even better.
- Problems with customer services and call centres were commonly mentioned as limiting full use of service.

5.2.2 Consumers suggested a number of strategies to overcome these barriers to access:

- There was felt to be a strong need, especially among those with severe/profound hearing impairments, for much greater awareness of their needs among the general public and among friends, family and carers.
- There was felt to be a need to focus on reduction of cost barriers; specifically the cost of; access to services; devices; additional equipment; aids; and packages/tariffs.
- There were a number of suggestions regarding packaging, promotion as well as sales and marketing of devices that could improve usage.
- It was felt important that retailers should play their part, properly training sales staff to be able to meet the needs of those with hearing impairments as well as ensuring that devices and equipment are displayed in a way that makes it easy to identify relevant features. The provision of demonstrations and free trials of equipment was also suggested.
- Consumers suggested that suppliers of specialist equipment could promote their goods using more mainstream channels, and in more mainstream ways, rather than using specifically hearing-related channels.
- Consumers felt that focus should be put on making sure that telephone-based services, particularly call centres, provide clear and easy ways for those with hearing impairments to communicate easily and without embarrassment. Specifically, it was felt that call centre staff should be better trained to communicate with those who have a hearing impairment.

- It was felt that communication service providers should do more to highlight existing services of interest to those with hearing impairments, as well as focus on how better to meet these consumers' needs in the future.
- There were several suggestions regarding training in voice-based telephony particularly for younger children, SMS for older consumers and internet training and access.
- There were requests for more promotion of the benefits that already exist for those with hearing impairments; for example, automatic subtitle recording.
- Regarding television, suggestions were mainly about communicating content through subtitling and signing.
- As mentioned earlier, the Deaf community stated the need for involvement in programme development for mainstream broadcasting as well as in making programmes 'for deaf people by deaf people'.

5.2.3 Assistance schemes

- When assistance schemes were discussed, consumers tended to think of these in terms of financial assistance to get access to services, and training in their use. In general, consumers did not separate these types of schemes when they referred to 'assistance' unless prompted to do so.
- There was low awareness of any assistance available for people with hearing impairments, and even when consumers were aware of assistance, they often seemed reluctant to take advantage of it.
- Respondents felt that there was not enough targeted information about assistance. Younger consumers, in particular, frequently complained about their lack of awareness of the assistance that was on offer.
- Experiences of assistance were generally positive. However, this assistance was not understood in the context of specific 'assistance schemes'; rather as help provided by government bodies.

5.2.4 Complaints and rights

- This qualitative research indicated a lower than average overall likelihood of these consumers complaining. This was due to lack of confidence, concerns that complaints procedures would not be geared to their needs, and a resistance to asking other people to complain on their behalf.

5.3 Barriers to access

Respondents tended to see two types of barrier to access: firstly, in using telephone-based services such as call centres; and secondly, in using a particular communications device or service.

5.3.1 Telephone-based customer services

Telephone-based customer services were felt not to be tailored to the needs of those with hearing impairments.

5.3.2 Call centre staff

There were consistent complaints about call centre staff and their general lack of awareness of how to communicate with people with hearing impairments. Indeed, there was a significant number of distressing anecdotes from individuals with more severe/profound hearing impairments of not being able to make themselves understood, and of call centre staff simply putting the telephone down on them.

In addition, even when procedures were in place, such as the provision of a text phone number for those with hearing impairments, it seemed that call centre staff were often not aware of them and/or were not implementing them. Several anecdotes recounted consumers with hearing impairments using a text phone and not getting any response from the call centre.

The fact that many call centre staff have accents was also frequently raised by consumers with hearing impairments. Many claimed they could not hear what these call centre staff were saying.

'Someone put the phone down on me because they thought I was making a prank call' (45-59, profound hearing impairment)

5.3.3 National emergency services

Consumers with severe/profound hearing impairments frequently complained there was no consistent national method for getting through to the emergency services quickly. It was claimed that the approach taken to emergency services varied considerably by nation and by region: some claimed to have to remember a special text number or a prefix for type talk; one respondent said she had been told to carry a printed sheet which she was meant to fax to the emergency services. Consumers generally complained that they could not remember special numbers and/or did not carry it with them. Many requested a single, nationally-promoted procedure.

5.3.4 Account holder authority

Several people across the sample reported unpleasant experiences with service providers who insisted on them, as the account holder, communicating directly over the telephone.

'Once I was forced to speak to the operator and I could not make myself understood – I was in tears' (25-44, profound hearing impairment)

'I have to ask my mum to pretend to be me - it's ridiculous' (18-24, profound hearing impairment)

There were complaints that there was not an established, straightforward system, whereby people with hearing impairments could give another person authority to deal with their account at the time of opening.

5.3.5 Automated telephone systems

Many people, across all levels of hearing impairment, complained about automated telephone systems and the lack of a quick opt-out system for those who cannot use these systems.

Among those who had attempted to use these systems, there were many complaints that the options come on too quickly and, in the case of type talk users, it was not possible to get the type talk operator on the line before the options came on.

5.4 Barriers to using devices

5.4.1 Fixed-line telephones

Fixed-line phones were reported as having the most barriers to access, due to their sole focus on voice communication.

Barriers to access for fixed-line phones varied according to the individual's level of hearing impairment. Specific barriers to access among those trying to use the voice-based function on the fixed-line telephone without additional equipment/aids included:

- concerns about using the service at all, as a person with a hearing impairment;
- lack of awareness of services, mainstream aids or specialist equipment options that might help them use the service; and
- poor experiences of choosing telephones: for example where no indication was given at the point of sale about features relevant to those with hearing impairments, such as the hearing range of a phone's ring tone.

Specific barriers to access among those trying to use the voice-based function on the fixed-line telephone with additional equipment/aids included:

- poor perception of, and experiences with, mainstream aids and specialist equipment; especially the compatibility of hearing aids with the telephone; and
- the perception that text phones were expensive. This referred to the cost of the equipment; consumers did not mention the cost of calls when discussing affordability.

Specific barriers to access among those not using the voice-based function on the fixed-line telephone, especially for young pre-lingual children, included a lack of confidence in using the fixed-line phone.

5.4.2 Mobile phones

Mobiles were felt to present similar barriers to access to fixed-line telephony when using the voice function. Many respondents felt that barriers were even worse than for fixed-line phones, due to:

- lack of confidence with the technology per se (especially for consumers aged 60+, and those in C2DE socio-economic groups);

- greater inertia, and reluctance to try something new (especially for consumers aged 60+, and those in the C2DE socio-economic groups);
- inferior/inconsistent sound quality;
- more problems associated with compatibility of the mobile phone with specialist equipment; and
- high levels of concern about the cost of equipment to improve the user experience: for example, specialist Bluetooth equipment.

However, the mobile phone focus on SMS, as well as access to other non-voice functions, was felt by many to outweigh these barriers to access, especially by consumers under 45.

Two barriers to mobile access among heavy users of SMS were the perception of high cost, and of lack of the availability of text tariffs.

5.4.3 Internet

Barriers to access to the internet for those with a hearing impairment were lower than for other devices, as using the internet does not rely on being able to hear. Users are therefore less likely to need specialist equipment or aids.

General barriers to access for non-users included:

- perceptions of high cost, both in relation to purchase of a PC and internet access;
- general lack of confidence about using the internet (regardless of hearing impairment); and
- lack of internet take-up by other members of the social group, and therefore less value in using it; e.g. the reduced value of email if peers do not use it.

Many users, particularly the older age group, were not using a wide range of internet functions and were typically restricting their use to emailing and browsing the web.

Barriers to use of a wider range of functions among these consumers included:

- the lack of perceived relevance: e.g. social networking sites (especially among older consumers); and
- concerns over financial security, especially among older consumers, in relation to buying goods over the internet.

Barriers to access among those using a wider range of functions tended to be more hearing-impairment specific and included:

- concerns that children with hearing impairments using functions such as social networking were particularly vulnerable;
- use of complicated language on the internet, especially for children with more severe/profound hearing impairment, and those who were pre-lingual. There were frequent requests for more straightforward English, and for the option to convert text to sign language, on banking, and similar, sites; and

- criticisms of downloads: lack of subtitles and poor quality visuals that make lip-reading impossible.

'The problem is the language – it's always very complicated – they need to simplify it' (18-24, profound hearing impairment)

5.4.4 Television

Barriers to access to television were focused on being able to hear and understand the content rather than take-up of the actual television service; all the consumers spoken to had TV access.

Frequently reported barriers included:

- social anxiety and a lack of confidence in expressing needs (evident across the sample but especially among consumers aged over 60 and those in the C2DE socio-economic groups), e.g. not wanting to disturb others by turning the sound up;
- lack of awareness of the services available, and of devices and mainstream/specialist equipment options that would help with their hearing and improve usability;
- no guidance, when purchasing a television, on what features would be appropriate for a person with a hearing impairment; for example, a wide volume range, surround sound, the positioning of the speakers or a plug for headphones; and
- poor perception of, and experiences with, mainstream or specialist equipment, for example headphones or hearing loops which are too obvious or ugly.

Additionally, a number of broadcasting-specific barriers were consistently raised, including:

- advertising at a higher sound level than the programmes;
- an increase in reality television programmes, whose presenters have not been trained in presenting, with a resulting loss of clear pronunciation;
- greater use of presenters with regional accents;
- 'creative/abstract' filming: these styles are less compatible with subtitles; and
- a dearth of programmes made by deaf people for deaf people: the focus was perceived to be on (hearing) signers interpreting programmes made by hearing people rather than deaf signers directly communicating deaf programmes made by deaf people. This was felt to lead to lower quality communication and reduced satisfaction with signing services.

'People have been complaining about this for years [loud ads] and nothing has been done' (45-59, severe hearing impairment)

'I bought a new TV and it has no plug for the headset' (45-59, moderate hearing impairment)

Consumers also complained about the effect of background noise on programmes on their ability to hear programme dialogue.

'There's always this unnecessary background noise in the background of a lot of programmes. They could do something about it. It's not just me who hates it but my mates and my mum' (25-44, mild hearing impairment)

'Increasing the volume doesn't help as the background noise just gets louder' (18-24, severe hearing impairment)

'I sometimes can't hear the characters talking if there is music playing in the background' (25-44, moderate hearing impairment)

'My hearing loss does impact on me – an orchestra is overpowering but I can't hear the singers...in a battle scene when they shout orders I can't hear it...'(45-59, moderate hearing impairment)

'The music's louder than the voicesi use headphones but I can't hear' (45-59, moderate hearing impairment)

'For all broadcasting they should be aware of what standard of hearing is needed....' (25-44, severe hearing impairment)

5.5 Strategies for overcoming barriers to access

5.5.1 Awareness of the needs of the hearing-impaired

People with hearing impairments felt that if their lives were to be improved and their experience of communication services enhanced, there needed to be a much greater awareness, both among the general public and among their friends, family and carers, of what hearing-impaired people need in order to maximise their quality of life.

The benefits of this increased awareness would be: greater acceptance, awareness and incorporation of hearing-impaired people's needs into all aspects of everyday life and their communications experience. Examples might include: realising that those with hearing impairments need to have the television louder and making allowances for this; choosing devices with the needs of the hearing-impaired person in mind; and encouraging older consumers to use text-based communication like SMS and email.

5.5.2 Affordability

Affordability was a consistent theme in hearing-impaired peoples' access to services, specifically, the cost of devices, additional equipment, specialist aids and packages/tariffs.

5.5.3 Design, packaging and promotion of mainstream communication devices

The design, packaging and promotion of mainstream communication devices should be developed to meet the needs of people with hearing impairments:

- Devices should, wherever possible, be designed to maximise ease of use by hearing-impaired people; e.g. telephones with appropriate ring tones, television with appropriate built-in speakers and a facility to plug in headphones.
- Devices should be labelled and packaged so that people with a hearing impairment can easily identify whether (or not) the equipment fulfils their needs.

5.5.4 Design of mainstream equipment

The design of mainstream equipment to help hearing-impaired people use mainstream communication devices should, wherever possible, meet their functional and emotional needs; for example:

- Equipment should be stylish, unobtrusive and minimise disruption to others.
- Equipment should be capable of being personalised to the needs of the individual, for example, in terms of tuning.

5.5.5 Sales and marketing

Sales and marketing of mainstream devices, as well as specialist equipment, should recognise the desire for communication to come through mainstream channels such as lifestyle magazines. This is especially the case among those who are younger and those with mild/moderate hearing impairment.

5.5.6 Responsibility of retailers

People with hearing impairments feel that retailers could, and should, do much more to promote communications devices and equipment for those with a hearing impairment, specifically:

- customer service staff within retail outlets should be trained to meet the needs of those with hearing impairments; they should be able to recommend appropriate mainstream devices and show how these can be adapted, highlighting facilities like the ability to record subtitles and they should alert consumers to equipment which would be helpful to them;
- display and merchandising of devices/equipment should highlight features relevant to those with a hearing impairment; and
- demonstrations and free trials of equipment should be available.

'If I asked someone about the benefits of different mobiles they wouldn't have a clue' (45-59, moderate hearing impairment)

'All these banks have notices saying they accommodate people with hearing impairments but it's just talk' (25-44, severe hearing impairment)

'People aren't deaf aware, they don't know about the deaf world, young people should all learn to sign...when I went into McDonalds the other day .. we pointed to the tomato sauce and the guy behind the counter signed back – there should be much more of that in shops' (15-17, profound hearing impairment)

'All the retailers wouldn't know a deaf person if it hit them in the face! – we're just left to get on with it or they talk VERY LOUD' (45-59, moderate hearing impairment)

'There should be greater acknowledgement of what hard of hearing means and they should accommodate it without making people feel different or making them pay for it' (25-44, severe hearing impairment)

5.5.7 Specialist suppliers of equipment

Consumers felt that suppliers of specialist equipment could do much more to promote their goods, by using different channels to target a broader range of consumers. For example, many hearing-impaired people would not consider going to the RNID to find out about equipment and would be much more comfortable approaching a mainstream supplier.

5.5.8 Telephone-based services

Respondents felt that providers of telephone-based customer, and other, services should focus much more on the needs of those with hearing impairments. Specific areas in need of improvement were:

- call centres and training staff should meet the needs of those with hearing impairments, and address problems related to clarity of communication, arising from employing call centre staff with heavy accents;
- there should be an emergency service strategy for deaf people, and this should be well-publicised;

- there should be an improved, and consistent, policy for account authorisation for those with hearing impairments; and
- a more consistent and effective policy for automated telephone services, to make them usable by those with hearing impairments.

5.5.9 Communications service providers

Consumers also felt that communication service providers should do more to communicate the benefits of their services to those with hearing impairments.

They felt that providers should also focus both on developing and communicating new services and benefits that would allow people with hearing impairments to choose a supplier on the positive basis of services available for those with hearing impairments (rather than, as is currently the case, on the basis of dissatisfaction because such services are not provided).

5.5.10 Fixed-line telephony

There were requests for free basic training on using voice-based fixed-line phones, especially for children with pre-lingual, profound hearing impairment, to enable them to recognise basic ring tones and communicate basic messages.

Consumers also asked for a mainstream voice-to-text service to be provided by a mainstream fixed-line operator.

5.5.11 Mobile phones

There were requests for provision of free training on SMS messaging, by mobile telephone providers, especially for consumers aged over 60.

Consumers felt that mobile telephone providers should provide, and promote, text-based tariffs designed for those with hearing impairments.

There were concerns that use of phonetic text was restricting access for children with profound/pre-lingual hearing impairment. They thought that if general awareness of the issues associated with hearing impairment and communication services were better highlighted, these children would not feel so excluded.

5.5.12 Internet

People talked a lot about provision of free access to the internet, free provision of PCs and specifically free training on email for those with hearing impairments, especially for consumers over 60, those from the lower socio-economic groups and those with more severe/profound impairment.

There were concerns about the lack of plain English in internet content and there were requests that the quality of written material should be controlled and that it should be possible to convert text to signing.

Many hoped that the quality of media downloads would improve, in terms of the quality of visuals and the presence of subtitles. However, they felt that a move towards this form of communication on the internet, without any quality control, could undermine some of the extremely valuable benefits of the internet for people with hearing impairments.

5.5.13 Television

There were requests for more promotion of the benefits for the hearing-impaired that already exist, for example, automatic subtitle recording.

Beyond this, most of the suggestions for overcoming barriers to access to television focused on improving broadcasting, and specifically subtitles/signing. Suggestions included:

- better training for television presenters, more focus on improved enunciation;
- dealing with background noise: the production guidelines should focus on the use of music while characters are talking;
- subtitles on a wider range of programmes, especially on commercial channels, and improved quality of subtitles on live broadcasts;
- more signing on a wider range of programmes and at more accessible times; better quality of signing and, within this, an option to choose subtitles and signing; and
- in general, there was a request for more deaf programmes made by deaf people.

5.6 Assistance schemes

In this research, respondents were asked whether they had participated in any assistance schemes in order to get help in accessing particular communication services. Where necessary, examples of assistance schemes were given, including help from local authorities, help from social services and the Jobcentre Plus *Access to Work* scheme.

5.6.1 Awareness

There was low awareness of any assistance schemes available to those with hearing impairments and, even when they were aware, consumers often seemed reluctant to take advantage of these schemes

Low awareness was perceived to be due to:

- lack of appropriately targeted promotion, for example, through the right intermediaries, at the right time, in the right place and using the right channels; and
- a general perception of funding cut-backs.

Younger consumers, in particular, frequently complained about their lack of awareness of the assistance that was on offer.

'When you're young you don't hear about stuff for deaf people' (18-24, severe hearing impairment)

'I'm a member of the British Tinnitus Association but I'd like it if they did more, to increase awareness amongst young people' (18-24, moderate hearing impairment)

5.6.2 Take-up

Even among those aware of the available assistance, there was often reluctance to take it up, due to concerns that the schemes would not take sufficient account of the specific needs of those with hearing impairments.

The concerns included: whether staff would be properly trained to deal with people with severe/profound hearing impairments; whether signers would be available; and whether face-to-face contact would be possible.

'I wouldn't even approach the local office for help – you'd worry they wouldn't have signers there and you'd be stuck in an open plan office and they'd just talk loudly' (18-24, profound hearing impairment)

5.6.3 Experiences of assistance schemes

There were some examples of consumers seeking assistance and experiencing some of the barriers to access described above. However, a number of very positive experiences of assistance schemes were also described. These typically involved:

- the provision of free equipment; for example, text phone/head phones provided by social services;
- the provision of a service to overcome barriers to accessing communication services. For example, a person who would make phone calls on the hearing-impaired person's behalf, provided by Access to Work;

- networking with, and support from other people facing similar issues. For example, local clinics organising groups to allow people with hearing impairments to meet and exchange communication tips; and
- the provision of classes to aid communication. For example, free lip-reading classes (there was felt to be a desperate shortage of these across the country).

Assistance that had been received tended to have been offered as the result of an ongoing relationship with social services/a clinic/Jobcentre Plus rather than proactively sought.

5.6.4 Channels of communication

Consumers consistently expressed a preference for face-to-face provision of information about assistance, ideally provided by a known intermediary at an appropriate time, for example at a clinic appointment.

There was also evidence of use of websites as a key means of getting support, especially among the young respondents, for example www.hoh.co.uk; RNID; and www.signcommunity.org.uk.

5.6.5 Desired outcomes from Assistance Schemes

It was felt assistance schemes should focus on:

- information about, and provision of subsidised or free communication service access and equipment, most notably internet access and PCs;
- providing free training, especially for older people, on devices and functions of most value to those with hearing impairments, namely SMS and email;
- providing free training for pre-lingual/profoundly deaf children on fixed-line telephones;
- provision of classes to aid communication, for example, lip-reading and signing; and
- showing how people with a hearing impairment can maximise their use of different communication services, for example, by showcasing different devices/ equipment and aids.

5.6.6 Communication/delivery of assistance schemes

Improved communication about assistance schemes was felt to be at least as important as the content of such schemes. Respondents felt that much more could be done to make sure that people with hearing impairments find out about assistance at the right time, through the right intermediary/channel and in the right way.

Requests included:

- better use of appropriate intermediaries, at appropriate times, to impart and to highlight the availability of information - for example, GPs, nurses, consultants and nurses at audiology clinics
- a focus on highlighting the availability of face-to-face or online advice.

- the provision of reassurance about staff training and privacy; allowing for pre-booking of appointments; highlighting availability of appropriate support, e.g. signers; and
- better and more extensive use of appropriate channels for the display and communication of information in public places and in appropriate media (this was especially important for younger consumers with mild/moderate hearing impairments).

5.7 Complaints and rights

5.7.1 Complaints

Some of these consumers claimed that there were unlikely to complain about services, both for general and hearing-impairment-related reasons, including:

- low levels of confidence, especially amongst many older consumers, those from C2DE socio-economic groups and those with severe/profound hearing impairments;
- low awareness of how to complain;
- a dislike of telephone-based customer service systems, which were not felt to be user-friendly for people with hearing impairments;
- a belief that it would be difficult to make themselves understood if they did complain (especially those with severe/profound hearing impairment); and
- reticence to ask or to impose on others.

'I get my daughters to ring the council because I think they get annoyed when I say pardon all the time' (45-59, severe hearing impairment)

'My family would sort it out but they have their own lives [ref complaining to a fixed-line supplier]' (70+, severe hearing impairment)

When prompted, many consumers said that the service provider, manufacturer or retailer would be their most likely first port of call. However, many, especially those with more severe/profound hearing impairments, claimed they would not bother complaining and would rather use a different supplier in the future.

When asked who they would complain to if they could not resolve the issue with their immediate provider, most claimed they would let the matter drop. There was very low awareness of Ofcom and what it provides for consumers.

Annex 1

Sample matrix

Level of hearing impairment by age group

Level of hearing impairment	8-11s	12-14s	15-17s	18-24s	25-44s	45-59s	60-70s	70+
Mild	2	2	2	2	2	2	2	2
Moderate	2	2	2	2	2	2	4	4
Severe	1	1	1	1	1	2	2	2
Profound	-	2	1	1	1	1	1	1

Annex 2

RNID Hearing statistics

Deaf and hard of hearing adults in the UK

These are the latest estimated figures for the number of deaf and hard of hearing adults in the UK.

	Total	16-60 years	Over 60 years
Deaf and hard of hearing	8,945,000	2,474,000	6,471,000
Mild to moderate deafness	8,257,000	2,366,000	5,891,000
Severe to profound deafness	688,000	108,000	580,000

Source: http://www.rnid.org.uk/information_resources/aboutdeafness/statistics/

Age-related hearing loss

These are the percentages of those over the age of 50 and over the age of 70 who have various degrees of hearing loss. In the UK:

	Over 50 years	Over 70 years
Some kind of hearing loss	41.7%	71.1%
Mild hearing loss	21.6%	26.7%
Moderate hearing loss	16.8%	36.8%
Severe hearing loss	2.7%	6.3%
Profound hearing loss	0.6%	1.3%

Source: http://www.rnid.org.uk/information_resources/aboutdeafness/statistics/

Babies and children

These are the statistics relating to deaf and hard of hearing children in the UK:

Born each year with significant deafness	840
Deaf at three years old	1 in 1,000
0 to 15 years old who are moderately to profoundly deaf	20,000
0 to 15 years old who were born deaf	12,000

Source: http://www.rnid.org.uk/information_resources/aboutdeafness/statistics/