Ofcom Relay Services

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1. Executive Summary

**Research objectives**

The research was required to fulfil three objectives:

- Assess the existing Text Relay service and alternatives to it to understand which of the features of the service were important and which additional features, if any, would be desirable.
- Test the importance and desirability of a number of key features of the voice telephony service and the extent to which they needed to be offered by text relay or other services.
- Conduct a quantitative evaluation of the value to users of text relay and similar services, with a view to measuring potential take-up of new services and the value placed on faster versions of text relay, Captioned Telephony and Video Relay.

The research had two phases. First, qualitative interviews conducted face-to-face and online were used to gain an in-depth picture of the communications challenges faced by individuals with hearing and speech loss, the communications channels they used, and their views on relay services and other support services available to them. Second, a quantitative survey was used to obtain a more robust picture of the communications services used and to understand the value of text relay and other services.

A total of 94 people took part in the qualitative phase between 8th September and 21st October 2010, and 323 people took part in the quantitative phase between the 1st and 8th November 2010.

**Notes for readers**

The profile of participants who took part in the initial qualitative research was intentionally very different from the profile of those who took part in the second, quantitative, phase. Those who took part in the qualitative research were predominantly users of Text Relay, which is designed to meet the needs of those who are severely or profoundly deaf. Therefore, respondents in the qualitative phase were predominately severely or profoundly deaf. It was important to include Text Relay users at this stage to understand their response to it and alternative services.

The quantitative stage included a higher proportion of moderately deaf people and some who were not deaf but needed to communicate with those who were. Due to this difference in profiles of those who participated in the two phases of the research, there were some apparent inconsistencies in the findings from the two phases. However, when the attitudes of severely and profoundly deaf participants in the quantitative survey are compared with the qualitative findings, the findings were largely consistent. In order to generate a sufficiently large sample for the quantitative research, we relied on sampling methods where respondents were self-selecting.

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1 Participants defined their level of deafness
Since we did not recruit a random sample the results and differences between sub groups should be treated as indicative.

When describing the quantitative findings, we have typically identified differences in terms of the respondents’ level of deafness, i.e. severely deaf, profoundly deaf, moderately deaf. When describing the qualitative findings, however, we used the term ‘deaf’ to include respondents across the spectrum of hearing loss, from partially deaf to profoundly deaf.

Main findings
The findings highlighted here are based on both qualitative and quantitative data.

**Barrier-free communication was seen by some participants as a basic human right**

Some participants thought that being able to communicate without barriers was important to enable parity of communication with people who are not deaf. Some barriers mentioned included: the presence of an operator (which was seen by some as being intrusive and did not represent parity with hearing people), slow communications connections, and lack of awareness of how to communicate with people who are deaf or have speech difficulties.

Each of the following six conditions were seen by some participants as being important to achieving barrier-free communications:

- Services and equipment should meet the many different needs of those who are deaf and have speech difficulties;
- Use of everyday, mainstream technology should help to ensure that communications methods are up-to-date and that the general public understand how to use them;
- Services should cater for different situations and different needs so that individuals can be offered choice in the ways that they communicate;
- Services should allow deaf people and those with speech difficulties to enjoy the same level of access to their chosen means of communication as that which is available to the wider community;
- Access should be free at the point of use for alternative, specialist services or equipment that aids communication for people who are deaf or have speech difficulties;
- There should be better public understanding of the issues faced by people who are deaf or have speech difficulties and the ways in which their needs can be taken into account.
While communications technologies have improved, deaf people and those who have speech difficulties are not always able to use them

Although there was greater access to communication technologies that met the needs of deaf people and those with speech difficulties such as email, SMS, and Skype, some participants mentioned a number of challenges and frustrations due to limitations in the technology that was available. Examples included choosing options from an automated telephone service and call recipients who refused to accept incoming text relay calls. Some participants thought that improvements in communications technology needed to be reflected in the contact methods available to deaf people and those who have speech difficulties, for example, by businesses enabling customers to contact them via instant messenger/SMS.

Text relay is a lifeline but could be improved

Some saw a text relay service as providing a communications lifeline between those who are deaf or have speech difficulties and those who can hear and speak easily. Text relay was also seen as enabling deaf people and those with speech difficulties to achieve a high degree of independence. The service was not thought to have been improved as much as it could have been, however, given the advances in communications technology. Participants expressed a number of frustrations about the service in terms of speed, perceived lack of confidentiality, being impersonal and being off-putting to hearing people. Some participants said that the availability of other modes of communication, such as email, SMS text messaging and Skype, have led some who are deaf or have speech difficulties to reduce or stop using text relay services.

Text relay falls short of providing a ‘real conversation’

Participants considered that the most important characteristics of a good communications service for deaf people and those with speech difficulties were: accessibility; availability; confidentiality; mobility; and allowing a user to communicate as a “real person”. Text relay services lacked or compromised many of these desirable qualities, according to some participants.

Deaf people and those with speech difficulties used a range of different ways to communicate

The communications method chosen by participants depended on their personal preferences, the preferences of those they were communicating with, and the situation and context in which the conversation took place.

All of the alternative services tested were popular with some respondents

Faster text relay and captioned telephony received the highest levels of general support in the survey. This is because BSL users, who were the most positive about video relay, were a minority within our research sample.

In the qualitative phase of the research, some participants expressed strong interest in captioned telephony because it was seen as satisfying a number of needs that were not met by text relay, including the ability to hear the speaking person for those with some hearing. Some participants also believed that it would offer increased speed, and improved accuracy.
Faster text relay was widely deemed to be an improvement over the current service, but many of the disadvantages of text relay were seen to remain, for example, difficulty of getting a relay assistant, the obvious presence of a relay assistant in conversations, lack of relay assistant continuity, and difficulties in connecting to automated telephone routing systems.

Those taking part in the qualitative research thought that video relay was mainly beneficial for those who can sign, but in the quantitative survey, this service was valued by a wider range of participants (for example, people who wanted to communicate with sign language users). Some participants in the qualitative research had specific concerns about the possible expense of video relay, difficulty in using the equipment, the need for an appropriately lit environment, and lack of confidentiality.
2. Methodology

2.1. Overall approach and rationale
A user pilot group was convened to advise on some of the issues that might be faced in conducting research with the target audience and to comment on our proposed lines of questioning. This was followed by a series of qualitative face-to-face discussions with individuals and groups of two to four participants, and by online group discussions with up to nine participants. A total of 94 people took part in the qualitative phase of the research. All face-to-face discussions were conducted with appropriate communication support as required, e.g. a BSL interpreter, lipspeaker or speech-to-text reporter. Finally, 323 respondents completed a quantitative questionnaire that was distributed in both online and paper formats.

This chapter describes how that was achieved.

2.2. Research design, collaboration and disability awareness
From the beginning of the programme, the research was guided by four principles:

- Involving a sample of people with a range of hearing and speech loss;
- Ensuring that those who were consulted were not limited to existing networks such as lobbying organisations thereby including a balanced range of people and opinions;
- Ensuring that those who were consulted were offered communication support suited to their needs;
- Designing the project so that it took account of the needs of those with hearing and speech difficulties and asked questions that were relevant to them.

As work began, Opinion Leader was given the opportunity to present the research programme to some of Ofcom’s consumer and disability stakeholders. This meeting was designed to brief stakeholders on the research process, but the discussions also provided some useful background on a number of technology and equality issues from the perspective of stakeholders.

Throughout the research process, we received a number of comments, suggestions and requests from Ofcom’s stakeholders. Many concerned the language to be used in the research materials e.g. the terminology for referring to deafness and disability. Other comments focused on our questions about the value placed on communications services. Some stakeholders felt that these were inappropriate questions to ask because they felt they implied that users should pay, or pay more, to access such services. In all cases the research team considered these concerns and sought to use them in a constructive way.
2.3. User pilot group and pilot studies

A user pilot group, recruited through personal and online social networks, was established to ensure that the research took into account the needs of those involved and asked clear questions that did not offend. The user pilot group allowed us to ensure that the research was firmly rooted in the language and context of people with hearing and speech loss who do not all refer to their deafness or difficulty with speech in the same ways. We were able to anticipate and explore these issues in a visible and proactive way with the user pilot group.

The group was convened for one face-to-face meeting at Opinion Leader’s offices, with appropriate communication support provided (BSL interpreter and a speech to text reporter). At this meeting we presented the planned research approach and solicited input on a number of issues including:

- The language to be used when describing people with different levels of hearing and speech loss;
- The planned recruitment approach and channels;
- Outlines of the research materials

The research team subsequently sought feedback from the user group on the draft research materials by email. Discussions with the user group were very useful in planning the research and their input is gratefully acknowledged.

2.4. Sample structure

The Royal National Institute for Deaf People’s (RNID) factsheet estimates that there are almost nine million deaf people in the UK\(^2\), including an estimated 688,000 who are severely or profoundly deaf, and Sense report that 356,000 people in the UK are deafblind\(^3\). These groups needed to be included in the research. It was also important to include those with moderate hearing loss, those with friends and family who use text relay, and those who have speech loss but no hearing loss. However, no estimated population figures were available for these other groups.

Given that a profile of individuals with speech and hearing loss that included additional variables such as age, socio-economic group or use of BSL was not available, we drew up a sample frame that required a good mix of different types of respondent, incorporating the following five variables:

- Severity of deafness (moderate, severe and profound);
- BSL use;
- Use of speech;


\(^3\) [http://www.sense.org.uk/what_is_deafblindness/urgency](http://www.sense.org.uk/what_is_deafblindness/urgency)
• Friends and family of deaf people;
• Professional Text Relay users (people who use text relay to communicate with customers or clients)

Age, gender, ethnicity, location and working status were also considered as variables, again with the aim of ensuring a good spread of each without imposing hard, interlocking quotas.

2.4.1. Qualitative sample structure and research locations
The design of the qualitative phase called for information to be gathered from participants either by interview in one of four geographical locations or by text-based online discussion groups. Twelve interviews were conducted in each of the four geographical locations and four online discussion groups were held, each with 10 participants.

We conducted fieldwork in London, Manchester and Glasgow to get a reasonable spread of UK respondents. Recruitment in the less populated Taunton area proved difficult and we were unable to conduct any interviews in this location. The decision was taken to replace this with a second session in London. Text based online discussions were conducted using our in-house web platform. The profile of interviewees can be seen in Appendix 2.

2.4.2. Quantitative sample structure
The quantitative phase sought to conduct interviews with 200 individuals as a minimum, broken down as follows:
• 50 deaf BSL users (minimum quota);
• 50 deaf Text Relay users (minimum quota);
• 50 deaf Text Relay non-users (minimum quota);
• 50 non-deaf (including friends/family and those who may use relay services in a professional capacity)

Beyond these parameters we did not introduce other quotas as it was felt that the above minimum quotas were the most important in determining views on communications services. We also wished to be certain of having enough interviews in each of these groups to make comparisons between them.

The sample consisted of individuals drawn from an omnibus panel sample and from those who had opted to participate in the survey through our own recruitment channels, which are outlined in Section 2.5. At the end of the quantitative phase we had received responses from 323 participants.

2.5. Recruitment
Our experience in conducting research with hard-to-reach audiences and those who would not typically get involved in consultations has taught us that no single recruitment channel would be sufficient to generate the samples required for the qualitative and quantitative phases of this
Our approach to recruitment was therefore multi channelled, helping to reach a good cross section of participants and include those who would not proactively offer their views or get involved in consultations.

The channels we used in recruiting participants for this research can be seen below.

Our first step was to set up a dedicated webpage. This webpage hosted an online questionnaire that allowed people to register their interest in taking part, provide demographic data and indicate which form of research they would be most willing to undertake, i.e. face-to-face interview, online discussion group, online questionnaire, or paper and pen questionnaire. The webpage also featured a BSL video outlining the aims and objectives of the research.

We then contacted the following types of organisations to ask them to help publicise the research and distribute the website URL as widely as possible:

- Organisations and charities that support people who are deaf;
- Organisations and charities that support people who are deaf and blind;
- Organisations and charities that support people who have speech impairments;

4 It should not be inferred that any of the organisations we contacted endorsed either the recruitment or research methods, simply that they were contacted as a means to reaching potential participants.
• Businesses and charities which use text relay services to communicate with their customers, such as utility companies and advice providers;
• Other Government and third sector organisations with a remit on equality and disability issues

We also used our national network of recruiters to invite individuals to participate who were less likely to be reached through support and advocacy organisations or charities.

Social media and online discussion boards were also used to publicise the research and the webpage. Notices were posted on Facebook groups and also on discussion forums for those with hearing and speech loss.

In order to consolidate inputs from the various recruitment methods, most of the information was collected through the webpage, which became the ‘recruitment hub’. For those who did not have access to the internet, details were collected using recruitment questionnaires that were administered either face-to-face or by telephone (using Text Relay if necessary).

This allowed all the information on possible participants to be collected in one central location and enabled us to see how quotas were filling on a daily basis. Members of the research team then began to contact those that had registered to book interviews and appointments to participate in discussion groups. We made efforts to ensure that non-internet users were not restricted from taking part, and provided a freephone telephone number for those who wished to use it. We received a number of text relay calls to discuss the research in response to this.

2.6. Qualitative research methods

The qualitative research methods we used were, as far as possible, participant-led, in the sense that participants were given the choice of participating in face-to-face interviews or online discussions. All participants were offered any necessary communication support.

Face-to-face interviews were conducted in city centre venues in London, Manchester and Glasgow, in September 2010. According to need, interviews were conducted with the aid of BSL interpreters, speech to text reporters and lipspeakers. All interviewers had previously undertaken a half day course on deaf awareness provided by the RNID.

Interviews were exploratory in nature, and when the need to discuss alternative communications technologies arose, e.g. video relay, we used illustrations to help show how these services worked, as well as explaining the process verbally. We also conducted one interview using MSN Messenger, at the participant’s request.

Online qualitative research was conducted using our own in-house software tool during October 2010. This allowed up to ten individuals to convene online for a text-based discussion. A moderator was present and also typed questions for participants to respond to.
The qualitative research materials can be seen in Appendix 5.

2.7. Quantitative research methods
The quantitative phase of the research took the form of an online survey and, for those that preferred it, an identical paper questionnaire.

It is worth noting that the vast majority of survey interviews (319 out of 323) were conducted online. While using an online methodology may have excluded those who are not internet users, we took steps to ensure that the paper self-completion questionnaire was easy to complete.
3. Communications in context

3.1. Introduction
This chapter explores the many different aspects of providing communications to those who are deaf or have speech difficulties. It describes their communications needs and preferences and outlines the ways in which people communicate with their friends, family, work colleagues, and a range of different service providers. It highlights the challenges in communicating with different groups that those who are deaf or have speech difficulties have experienced and considers what would make a positive difference. Finally, the chapter explores attitudes to access and willingness to contribute to the costs of barrier-free communications.

As the differing needs, preferences, and experiences of people who are deaf or have difficulties with speech are discussed in this report, it is helpful to remember that degrees of deafness vary, as do speech difficulties. Being profoundly deaf from birth poses different issues than a progressive loss of hearing with age. Some deaf people have speech and some do not. Speech difficulties can arise in circumstances that have nothing to do with deafness, such as strokes, oesophageal disease, and accidents. British Sign Language (BSL) is a language in its own right. Because BSL has its own conventions and limitations, it can shape thoughts and influence the expression of feelings in different ways from spoken and written English, especially if BSL is a person’s first or only language. Finally, people who are deafblind, including those who participated in this research, have distinct needs.

Participants who were deaf or had speech difficulties used a range of different ways to communicate with their family, friends, and work colleagues, as well as with the wider community. The range of ways that were used reflected:

- Individuals’ specific needs and preferences i.e. what was effective and comfortable;
- The need to take account of the technology used, or not used, by others;
- Situational differences, such as a felt need for confidentiality, emotional content or anonymity in relation to an intermediary such as a relay assistant or interpreter in certain sorts of conversations.

The last section of this chapter, Section 3.9, contains pen portraits of four individuals who took part in the research. These portraits are intended to demonstrate the challenges individuals face and what changes would make a positive difference to them.

3.2. Chapter summary
Some participants saw barrier-free communications as a basic human right. Consequently, it was felt to be very important to have access to services and equipment that meet the many different needs of those who are deaf and have speech difficulties. Participants identified a number of different aspects of communications and service provision as being critical to having services that were accessible and appropriate.
• Participants described a range of different needs and required very different forms of communication to meet these needs. A “one size fits all” approach was rarely considered to be adequate.

• To cater for different situations and different needs, some participants wanted to be offered choice in the ways that they communicated.

• Some individuals who were deaf or had speech difficulties expressed a desire to enjoy the same level of access to their chosen means of communication as that which is available to the wider community.

• Some participants felt that there should be no financial penalties for using alternative, specialist services and/or equipment that aid communications for people who are deaf or have speech difficulties.

• Some believed that education and information needed to be provided to widen and deepen understanding of the issues faced by those who are deaf or who have speech difficulties and of the ways in which their needs can be taken into account.

**Key differences by sub-groups revealed by survey data**

- Sign language users and those who were profoundly deaf were more likely to communicate via SMS than non-signers or those who are moderately deaf or not deaf.
3.3. Key aspects of the service

Although the difficulties and needs of participants varied, participants felt that six characteristics were important conditions or requirements for the communications equipment and services that such people could use. These were:

1. Choice
2. Respect
3. Independence
4. Equal access to communications services
5. Awareness
6. Inclusivity

3.3.1. Choice

Some participants believed that it was very important for everyone to be given choice - choice in the ways they communicated as well as in the equipment and technology they used. Choice would allow those who are deaf or have speech difficulties to participate more equally in communications with the wider community while taking account of the many and different needs individuals have as they communicate in a range of situations.

“There is no such thing as one size fits all and needs will vary according to the specific situation as well as the level of deafness / speech difficulty. We need choice”

Severely deaf, Glasgow

“A hearing person has a choice of how to communicate. A deaf person often has to use the one thing that is available to them. We have no choice or independence”

Profoundly deaf, London

“We can communicate in a range of different ways – SMS, email, signing, webcam, Skype. It depends on who you are talking to - we need the choice”

Profoundly deaf, London

3.3.2. Respect

Respect was seen to be critical by some participants. Such participants wanted to be seen as credible individuals. They said that the ways in which different communications services were delivered should allow an individual to be treated with respect.

“We can be made to feel like second-class citizens in the way we are treated”

Profoundly deaf, London
Participants felt that respect could be demonstrated in a number of different ways:

- Providing barrier-free communications and offering an experience that was as similar as possible to that enjoyed by hearing people;
- Being able to hold a conversation in real time with no interruptions;
- Being able to hold a conversation in which the words used are theirs and not what someone else thinks they are saying or a précised version of what they are saying;
- The ability to hold private, confidential conversations without the involvement of a third party.

“A real time conversation - the ultimate for me. That makes you feel like a real person”

Profoundly deaf, Glasgow

“I want people to be able to communicate with me directly; not through someone else”

Severely deaf, on-line group

“I think it is important for your call to be personal. Otherwise it is like getting your mum to make a call on your behalf”

Profoundly deaf, online group

3.3.3. Independence

Participants felt strongly that communications should enable individuals who are deaf or have speech difficulties to live independently, have access to a full range of services, and enjoy experiences available to the wider community.

“Anything that means I do not have to rely on friends and family to contact different services is a good thing. I want to be independent”

Profoundly deaf, London

Participants recognised that those who were deaf or have speech difficulties could be at risk because of difficulties in communicating quickly and easily with the emergency services and providers of other vital services such as utilities, banks and health care professionals. Such risks were seen as having an impact on the ability of some individuals to continue to live independently. Given the potential consequences of these risks, some participants felt that providers of emergency and vital services should look at ways of reducing the communications difficulties that deaf people and those with speech difficulties experience when trying to reach them.

“Deaf people are often at risk because of the inability to communicate effectively”

Profoundly deaf, Glasgow

“I was dumbstruck and horrified at my inability to help my friend when I realised I couldn’t call the ambulance because of my deafness.”
Profoundly deaf, London

“I live in constant fear that I will be taken ill in the night or there will be a fire and what do I do?”

Severely deaf, London

3.3.4. Equal access to communications services

Some participants regarded equal access to communication services as an important element of providing barrier-free communications, and they felt that developments in technology could be used to support equal access. Ideally, participants wanted equipment and services to incorporate features that enabled deaf people and those with speech difficulties to communicate in ways that were as nearly as possible on a par with people without hearing or speech loss.

“You must cater for people of different ability – especially when it comes to technology. Not everything is right for everyone”

Moderately deaf, Glasgow

“GPs will not permit us to send texts or email -and yet hearing people can phone anytime”

Severely /profoundly deaf, London

Some participants felt that technology especially suited to people with hearing or speech loss might restrict communications with the wider community if it were too specialised and not generally available.

“[I] Don’t want to have to rely on technology that others might not have. That is why I like text (messages) and email. That is what everyone else has.”

Profoundly deaf, Glasgow

3.3.5. Awareness

Based on their experiences, participants felt that the communication needs of those who were deaf or had speech difficulties were not widely understood. This was seen to affect the way deaf people and those with speech difficulties were treated and the services they received.

“[One of the problems is] being treated as daft because I am deaf – [There is a] lack of understanding how to communicate with deaf people (like those people who look down and mumble)”

Severely deaf, lip reader Online group

“It is wrong because there is a whole community out there that are excluded from things and we just don’t know how to behave”
In addition, participants having hearing or speech loss generally felt that the wider community was not aware of the different technologies that were, or could be, used by those who were deaf or had speech difficulties. This perception was confirmed by some hearing participants whose jobs involved dealing, from time to time, with people who were deaf or had speech difficulties.

“We have a Minicom [textphone] that sits in a corner and no one has an idea how to operate it”

Call Centre Operator

“When we get a text relay call we often think it is a nuisance call and just hang up”

GP receptionist

3.3.6. Inclusivity

In general, participants recognised that those who were deaf or had speech difficulties had a very wide range of communication needs, and that this could make inclusivity difficult to achieve. Nevertheless, it was felt to be important for inclusivity to remain an objective. Furthermore, some felt that no groups should be excluded because their communications needs were not being met on a systematic basis.

“The trouble with text relay is that it is was fantastic when it was developed, but it hasn’t changed in the last 20 years and people don’t have the skills or the technology to use it”

Deafblind, London

“What about people whose first language is BSL? What is being done to help them?”

Moderately deaf, Online group

Some participants felt that where possible, the development of new technologies into mainstream products and services should accommodate the needs of deaf people and those with speech difficulties. This would avoid the need to adapt products and services for people with speech and hearing loss because they were not keeping pace with technological advances, as they believed had happened with mobile telephony.
3.4. The ways in which people communicate

Individuals who were deaf or had speech difficulties used a range of different ways of communicating with their family, friends and work colleagues as well as with the wider community. The variety of methods that were used reflected:

- The need for individuals to communicate in ways that were comfortable and effective for them;
- The need to take account of the technology used (or not used) by others;
- The demands of different situations such as needs for anonymity and confidentiality etc.

We asked survey respondents how they communicated with friends and family, with work colleagues, and with health services. As shown in Figure 3.1, respondents were most likely to communicate in person with each of these groups. The next most common ways of communicating were email and SMS texts, except with health services where use of the telephone was more common.

**Figure 3.1  Means of communicating with different types of people and organisations**
There were a number of differences and similarities in the means of communication used by different groups of respondents.

- Sign language users were more likely to communicate with work colleagues and friends using SMS and instant messenger than non-signers; 80 per cent of signers use SMS to communicate with work colleagues compared to 38 per cent of non-signers, while 96 per cent of signers use SMS with friends compared to 59 per cent of non-signers.

- There were no gender differences in the use of different technology to communicate. Younger people who were deaf or who had speech difficulties were more likely than older people to use email when communicating with other deaf people and hearing work colleagues. A total of 73 per cent of 35-54 year olds communicated with work colleagues via email compared to 41 per cent of those aged 55 or more. It should be noted, however, that a greater proportion of those over 55 were probably not in work when compared to those in the 35-54 age band.

- A total of 79 per cent of 35-54 year olds used email to communicate with deaf friends and family compared to 69 per cent of those aged 55 and over and 59 per cent of those aged 65 and over.

- Individuals who were profoundly deaf were more likely to use email to communicate with deaf friends and hearing work colleagues than those who were moderately deaf. They were also more likely to use SMS and Instant Messenger as a means of communication.

Figure 3.1b shows the means of communication that people with speech or hearing loss use in their dealings with service providers.

Two sets of commercial service providers - utilities (gas, electricity and water) and financial services - along with local councils appear to have created the most permissive and diverse environments for communications with people who are deaf or have speech difficulties (i.e. they offer a greater choice of contact method such as email, instant messaging as well as phone or in person). Seventy-five per cent or more survey respondents reported using five of the ten communication methods that were tested to communicate with such providers. Email, telephone and textphone using text relay were in common use for communicating with utilities and financial services and with local councils. In addition, utilities and financial services were widely accessed using Instant Messenger and textphone to textphone technologies, while local councils were often dealt with by post.

The range of methods for communicating with shops and restaurants appeared to be less permissive or diverse than was true of the other service providers shown in Figure 3.1b. GPs and other providers of health services provided an even more restricted environment for communicating with deaf people, as Figure 3.1 showed.
The way that respondents communicate with the organisations shown in Figure 3.1b differed among groups within the sample.

- Those who are severely or profoundly deaf were more likely to use email, textphone, and SMS text messages to communicate with electricians, plumbers, and builders than those who were moderately deaf.
- Those who were severely or profoundly deaf were more likely to use Text Relay to communicate with shops and restaurants than those who were moderately deaf: 31 per cent, 49 per cent and 2 per cent respectively.
- Those who were severely or profoundly deaf were more likely to use Text Relay to communicate with utilities, banks and insurance companies than those who were moderately deaf: 41 per cent, 64 per cent, and 3 per cent respectively.
3.5. The role of technology

Many participants reported that advances in technology over the past few years had made communications easier and provided more options for everyone. Some participants felt that deaf people and those with speech difficulties had benefited particularly from developments such as voice/video over IP, texting on mobile devices and email, which had helped some participants have real time, person-to-person contacts and take part in communications outside their homes much more readily.

New technologies that participants reported using included SMS/text, email, MSN, Skype, Facebook, Camfrog, OVOO and webcam. While these technologies were generally felt to have expanded the considerable range of communication options available to hearing people, they provided what were described as lifelines to people with speech and hearing loss, for whom few easy communication options had previously existed.

“I can use the phone OK. I use SMS, email and MSN messaging as well as live online messaging for utility companies. I prefer text message and email because I don’t have to say ‘can you repeat that?’ it is just so much easier to send a text.”

Severely deaf, lip reader, Manchester

“Easy access to Facebook is a way of making arrangements. [It] Rapidly updates on the move to say you have a message. [At the same time] we’re using it to communicate. We’re not using it like hearing people to play games and things.”

Profoundly deaf, Manchester

“I rely on my wife. I avoid contacting anywhere that has a call centre. I would rather do without”

Acquired deafness, Glasgow

Some participants noted that their ability to take advantage of new technologies could be limited by not being allowed a choice of methods of communication. This was very frustrating for some participants.

“Why can’t I request appointments by text or email? Why do people insist on phone contact?”

Profoundly deaf, Glasgow

“Insurance companies are very good at communicating and allowing you to ask for quotes on line but then insist on having a mobile number to call you back. There is no point”

Severely deaf, London
3.6. The challenges in communication

Some participants who were deaf or had speech difficulties said that they were more able now to access communication methods that meet their needs. Despite this, a number of challenges and frustrations remain due to limitations in technology and restrictions imposed by receiving parties.

- Some participants felt that some solutions ignored the possibility that deaf people might struggle to understand or use the equipment. Communications services requiring good keyboard skills or computer literacy were noted particularly in this regard.

  “I have never typed anything in my life and my fingers are all thumbs. How am I meant to communicate on a keyboard? I feel isolated”

  Acquired deafness, Glasgow

- Some organisations, such as GPs and utility companies, were reported to insist on communicating by phone and to refuse to communicate by text/SMS, despite some GPs and utilities sending out text or email communications themselves, such as confirmations of appointments.

  “It is a complete nightmare. GP sends me a text about an appointment I but have no right of reply”

  Speech difficulties, London

  “Usually if I text the midwife about something, she says she will call me back. Not ever so useful!”

  Severely deaf, Online group

- Some participants felt that many organisations did not understand that those who have speech or hearing loss may be able to use mobile phones to text but unable to use them for voice communications. For example, when asked to register on the internet, participants frequently gave a mobile number. However, for deaf people and those with speech difficulties, there was no facility to indicate that they only wished to receive communication by SMS, and this had led to complications and failure to deliver a service for some.

  “I wanted to set up a standing order and they wanted my phone number. They called me to confirm the instruction but I had to pass the phone to a friend to answer it. The bank said it was not valid and they would not agree to the standing order”

  Severely deaf, Glasgow

According to some participants, some companies, including those providing vital services such as utilities, did not permit email communications and did not offer an alternative to voice telephony for deaf people or those with speech difficulties.
“Call centres are a nightmare. They don’t give you time and (I) often don’t understand what the operator is saying”

**Online group**

“It can be difficult for a hearing person to adapt to the ways it [the phone system] works and they get impatient and hang up”

**Moderately deaf, online group**

- Some participants felt that advances in the telephone and computer systems used by some organisations had created difficulties for people using the existing Text Relay service. An example was given of a hospital that had installed an automated switchboard that could not recognise the prefix 1-8000, which is the prefix for placing text relay calls. It was reported that in other cases, call centre operators’ lack of awareness of the text relay prefix had led to calls being terminated.

“A nightmare! Hospitals have a menu. If you leave a message to call (a number prefixed by) 1-8-002 they don’t; they can’t”

**Profoundly deaf, London**

“The number comes up and it is unrecognisable to many call centre operators, so they hang up”

**Call centre operator**

- Some participants said they had encountered service providers that seemed to view those who were deaf or who had speech difficulties as “second class citizens” because of the slow speed and reduced efficiency of the communications services that were available for them to use.

“You start as a second-class citizen with text relay because you know the call is going to take two or three times longer than normal - and that is with a good operator.”

**Profoundly deaf, online group**

“If they [text relay calls] are recognised, many operators will terminate the call because of time targets – they know the call will take too long”

**Call centre operator**

A number of challenges were highlighted in responses to questions in the survey, particularly where respondents were asked about the effectiveness of SMS text messaging and of email for communicating with different people and organisations. Figure 3.2 shows the results for SMS text messaging and Figure 3.3 for email.
The majority of respondents said that SMS was good for communicating with friends and family, regardless of whether they had speech or hearing difficulties, but smaller proportions reported that SMS was good for communicating with service providers such as electricians, the emergency services or GPs. These findings were in line with the qualitative findings.

**Figure 3.2 How good is SMS text for communicating with different audiences?**

- **Hearing friends and family**: 82% Fairly Good or Very Good, 12% Adequate, 4% Fairly Poor or Very Poor, 1% Don't know.
- **Friends and family who have hearing or speech difficulties**: 72% Fairly Good or Very Good, 12% Adequate, 9% Fairly Poor or Very Poor, 11% Don't know.
- **Work colleagues**: 48% Fairly Good or Very Good, 22% Adequate, 17% Fairly Poor or Very Poor, 16% Don't know.
- **Electricians, plumbers, builders etc.**: 22% Fairly Good or Very Good, 17% Adequate, 35% Fairly Poor or Very Poor, 25% Don't know.
- **Emergency Services**: 17% Fairly Good or Very Good, 10% Adequate, 28% Fairly Poor or Very Poor, 45% Don't know.
- **GP / Other health services**: 11% Fairly Good or Very Good, 11% Adequate, 48% Fairly Poor or Very Poor, 31% Don't know.

Q2-1. How good are SMS text messages for communicating with these people and organisations? (Base: all answered, 166)
Profoundly deaf people were more likely than those who were moderately deaf to say that email was good for communicating with work colleagues: 74 per cent among profoundly deaf respondents compared to 53 per cent among those who were moderately deaf. Those who were profoundly deaf would probably be less able to use other forms of communication with work colleagues, and this may account for the difference.

3.7. What would make a positive difference?

Some participants felt that there were two key areas in which changes for the better could be made to support the objective of barrier-free communications.

- **Wider understanding of the communication needs and challenges facing deaf people and those with speech difficulties was called for.**

Some participants felt that there needed to be a much greater level of awareness of the communication needs and challenges faced by those who are deaf or have speech difficulties. These participants thought it was particularly important to ensure that there was an understanding of the various technologies used to support communications involving people who are deaf or have speech difficulties. They also felt it was important that there was an appreciation of the need to help provide choice and equality of access to an individual’s preferred technology.

“I find talking to professionals and businesses via telephone difficult, they ‘power talk’ and talk far too fast!”

Severely deaf, Online group
“Companies and other service providers need to understand the different ways in which people who are deaf communicate and adapt their communications systems”

Profoundly deaf, London

“Why isn’t someone talking to companies and the NHS about our difficulties?”

Severely deaf, Glasgow

• Readily available technology should be used to provide communications solutions suitable for use by people who are deaf or have speech difficulties.

Some participants indicated that wider usage of readily available, mainstream technology by people who were deaf or had speech difficulties could bring about a positive change to their communications environment. These participants thought that this would provide greater choice and access and more barrier-free communications. In particular, participants felt that mobile communications providers had a role to play in providing services which improved deaf people’s ability to communicate.

“Solutions should be phone and computer based to improve access”

Online group

“There is so much that could be done with texting, webcam, accessing text relay from mobile phones. But the providers need to get involved”

Severely deaf, London

Other participants emphasised the importance of ensuring that new technologies met the needs of those who might not be computer literate or have the dexterity to use certain types of equipment. Therefore, these participants also emphasised the need for choice if equality of access was to be achieved.

“It was all my granny could do to master text relay and that took years. I wouldn’t dare to suggest a computer to her!”

Hearing person, Glasgow
3.8. Attitudes towards contributing to costs of services

Some participants felt that charges for all telephone services used by people who were deaf or had speech difficulties should be the same as they were for hearing people. Some also believed that rebates were only available through BT, which led to their calling for rebates, e.g. for text relay calls, to be available through all providers.

“The only ways you can get a rebate is to have a BT landline. I have no other use for a landline and it doesn’t seem fair”

Profoundly deaf, online group

“There are companies are reducing costs for voice calls but what about video / emails / text messages for those who don’t want to/can’t make phone calls?”

Severely deaf, online group

“Have mobile phones that operate as text (SMS only) phones with pricing structures to match”

Deafblind, London

“Mobile phone companies penalise you for everything, because you always have to pay extra. I don’t want voice minutes!”

Moderately deaf, London

“[We have] little choice and to pay for things that others expect by right. E.g. voicemail that is voice to text is fantastic but we have to pay £5 per call. Who else does?”

Profoundly/severely deaf, London

While it was recognised that there may be additional costs in providing tailored services and equipment, participants commonly felt that such costs could and should be funded by the wider community. Some participants mentioned a model that had been adopted in the USA where all telephone subscribers paid a very low annual charge and the funds that were generated were used to subsidise communications for those who were deaf or had speech difficulties.

“In the US they charge a little bit and it goes into a pot to pay for universal services – great idea!”

Online group

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5 Rebates for text relay calls must be offered by all communications providers (fixed and mobile)

6 This is a misunderstanding by the participant as people do not need to have a BT line to get a rebate
3.9. Pen portraits

The following four profiles highlight the situations faced by some of the participants who were deaf or who had speech difficulties. They give a thumbnail sketch of the individual and how they cope with deafness or speech difficulties. The portraits also describe what these individuals considered to be important in relation to communications and what would make a positive difference to their lives. All names have been changed and some details have been made less personally specific to protect the anonymity of participants.
Sue

Profile
- Mid-forties
- Currently not working and finds it difficult to get employment
- Has had speech difficulties since she was born
- Difficulties in speaking increase with levels of stress and sometimes finds communicating in a “hostile environment” almost impossible

Living with speech difficulties
- Is unable to use the phone when she is stressed and so usually communicates by email
- Uses an aid to help her speech but some organisations (especially call centres) are a complete nightmare as they lose patience and slam the phone down
- Texts and phones family and friends
- Communicating with the NHS is very difficult. They do not accept emails or texts and if she phones they often are aggressive and challenge her. Receptionists say that they think she is either drunk or has learning difficulties. Now her only option is to visit to make appointments
- Tried using text relay once but was so appalled – will never try again. Concerns included relay assistant behaviour and the way they “interpret” what is said as well as the impossibility of having a private, confidential conversation

What is important?
- To have the same communications experience as everyone else
- To be shown respect by third party organisations
- For people to understand, have patience, and reduce the levels of stress that make speech difficult
- To have aids to support speech available at all times – including on-the-move
- To have support available 24/7

What would make a difference?
- A speech enabling device that is built into phones so that it is “always there”
- Relay assistant should tell recipients that a call from someone with speech difficulties is about to be put through, what to expect and how to behave. Sue said this service was available in Australia.  

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7 Text relay assistants in the UK say “You have a call from a deaf or speech impaired person and I will be relaying the call”
Mary

Profile
• Mid fifties
• Lives with husband who has hearing
• She is the main carer for her husband who has a critical illness
• Has been severely deaf since birth
• Has speech and relies on her ability to lip read
• One of her biggest fears is that something will happen to her husband in the middle of the night and she will not be able to summon help

Living with deafness
• Is very dependent on her husband to "listen" for her
• Leaves all of the telephoning that needs to be done to her husband. Even with an amplifier she will only talk to someone she knows, and only then if she knows what the conversation will be about.
• Tried text relay once – but never again. It is too difficult and frustrating to use
• She texts, emails and uses webcam to contact friends and family
• If she had to cope on her own, her first choice would be face-to-face communication so that she has total confidentiality and is able to lip-read. Her other choices would then be SMS text message or email

What is important?
• To be treated just like anyone else and to have a confidential, real time conversation
• To be able to communicate 24/7 – especially in emergency situations
• To have a choice of communication services including on the move
  “That is critical because that is the way we live our lives today”
• The ability to see / “hear” the tone of the person you are communicating with

What would make a difference?
• The ultimate for her is to be able to have a real time conversation with someone
  “That makes you feel like a real person”
• More widespread acceptance of text by the emergency services, businesses and other third party organisations
• Not to have to rely on a third party to “listen” and communicate for her

8 Emergency SMS is available in the UK but not all respondents were aware of this
9 Emergency SMS is available in the UK but not all respondents were aware of this
Dave

Profile
- Early seventies
- Retired and lives with his wife who is hearing
- Has acquired profound hearing loss that started 10 years ago
- The condition has got worse over the years, and while he is able to speak well, hearing is almost impossible
  “I don’t have problems communicating when I am doing the talking – only when I am doing the listening”

Living with deafness
- Gregarious by nature but is becoming increasingly isolated as he avoids going into situations where there will be a lot of people or he is unlikely to hear what is said.
- Is very dependent on his wife to be his “ears”
- Has a textphone but avoids using it because it takes too long and is too stressful. In particular he finds it very difficult to switch from voice to text and it seems to have so many hiccups that he avoids using it
  “I find it very stressful if I have to use the phone for any reason”
- Relies on his wife to make appointments with GP and to communicate with organisations such as banks
- He texts on his mobile and emails friends and family
- He has found that the ability to text and email has made a huge different difference and would like to see this used and accepted by more organisations
- If he has to cope on his own, his first choice is face-to-face communication, then text or email. Phone is not a realistic solution especially for organisations / companies that have automated menus
  “If you make a telephone call and it is a case of press button this and that it just doesn’t work. Even with the text phone, the type talk phone operator will say “would you like to leave a message after the beep” – but how are you supposed to hear the beep?”

What is important?
- To be treated just like anyone else and to have a confidential, real time conversation
- The ability to see / “hear” the tone of the person you are communicating with
- To have a choice

What would make a difference?
- More widespread acceptance of text and email by business / third party organisations – because it is accessible even if you don’t type too well
- Organisations understanding that just because you have a mobile phone it doesn’t mean you can hear!
• Captioned telephony because it can be used with everyone and it would allow him to do what he does so well, which is speak! He could also “hear” the emotions of the other person. BUT it needs to be simple to use!
**Helena**

**Profile**

- Mid twenties
- Lives in a shared house with three flatmates
- She works as a programmer for a web design company
- Lost some of her hearing 2 years ago after spending an evening with friends in a loud nightclub
- She left the club with sore, ringing ears. To her surprise, the ringing did not go away as she had expected it to do
- Making several visits to her GP, she was consistently told she had an ear infection. Eventually, six months later, a different doctor sent her to an ear specialist, who told her that she had permanently damaged the hair cells in her cochlea
- Her formal diagnosis is acute sensorineural hearing loss, leaving her with considerably ‘dulled’ hearing (in her own words)

**Living with deafness**

- Helena considers her hearing loss less of a disability or a major life change and more of a ‘hassle’
- This manifests itself largely where she is in large groups of people, where there is excess background noise, or where visual cues are not available:
  - Talking to a client on the telephone where others are talking near her desk, or if the radio is on
  - Sitting with a group of friends in a pub where there are several conversations going on at once
  - A colleague is trying to tell her something but their face is obscured behind a computer monitor
    
    “And if somebody whispers something to me I have no idea what they are saying. It’s most annoying in social situations really”
    
    “At work I now find that I’d rather somebody email me something than call me on the phone”

- She admits that she has begun to notice herself lipreading much more frequently, whereas before she was less conscious of doing so
- She also has difficulty successfully contacting certain organisations on the telephone where there is a quiet line or a quiet speaker on the other end
- As she does not have severe or profound hearing loss (i.e. she can hear many things still), she often finds that people do not take her difficulty seriously enough, or forget that this can be an issue for her
- Although her friends and colleagues are aware of the situation, she chooses not to ask for special equipment, such as a phone with an effective volume control, which may help
What is important?

- To be able to have a real time conversation without interruptions ("If it is somebody’s job to deal with customers on the phone they should really know how to talk clearly and properly!")
- To be able to understand the tone and content of the conversation, ‘especially when I am talking to clients.’
- To be able to have a private and confidential conversation ("I’m a girl!"")

What would make a difference?

- For people to be able to acknowledge and be consistent about the need to speak clearly and considerately. If her hearing got any worse, she may be keen to use a captioned telephony service:
  
  “I think it’s something that would not replace a conversation – I always want to have a conversation and hear speech, but it might help to ensure that I can follow what is happening in a conversation – especially at work.”
4. Important features of communications services for people who are deaf or have speech difficulties

4.1. Introduction
This chapter explores the different features of the equipment and services that were considered to be important in meeting the communication needs of individuals who are deaf or have speech difficulties. It looks at the ways in which services could be delivered and what features could be included in equipment. It also explores individual preferences for handset- and computer-based communications, and finally it outlines the “ideal” telephone service(s) for meeting the different needs of those who are deaf or have speech difficulties.

4.2. Chapter summary
Participants agreed that it was important to recognise that the range of needs of deaf people and those with speech difficulties was wide and that different people would need different forms of support at different times. According to participants, accessibility, availability, confidentiality and allowing a user to communicate as a “real person” were the most important aspects of such services. They also thought it was important for communication services to be mobile. Survey respondents also confirmed the importance of privacy (which is akin to confidentiality), of 24/7 service (which is an aspect of availability), and of being able to have real-time conversations (which contributes to being able to communicate as a real person). In addition, participants wanted communications services for people who were deaf or had speech difficulties to be affordable, with fair charging structures.

Key differences between sub groups revealed by survey data

- Having a real time, 24/7 conversation was more important to those who are profoundly deaf.
- Being able to interrupt conversations is more important to those in social groups ABC1 than those in C2DE.

4.3. Features of the service
There was a widespread belief amongst participants that communication services must recognise the many and different needs of those who are deaf or have speech difficulties.

4.3.1. Accessibility
Accessibility was widely seen by participants to be essential to effective and comfortable communications. They felt that it should be possible to access services from any locations, whether in a building with access to a landline or outside with access to mobile communications. Some participants identified access to mobile communications as a particular need in order to maintain equality with the rest of the community. There has been a move to mobile communications for society in general, and some felt that those who were deaf or had speech difficulties were not currently able to participate fully – a shortfall they thought should be
remedied. This wish for accessibility applied to the means of communication mainly used by participants: voice based, text relay, webcam or captioned telephony.

“[On the go is] critical because that is the way we live our lives today”

Severely deaf, on-line groups,

“Absolutely vital – give us what other people have got”

Profoundly deaf, Glasgow

“All communications need to be available on the go. “If I lived in the US I could make a text call [text relay call] from my BlackBerry. Why not in the UK?”

Severely deaf, London

4.3.2. Availability

Participants widely believed that 24/7 availability was necessary to ensure that those who were deaf or had speech difficulties had the same access to services as others in the community. 24/7 availability was seen to meet two key needs.

- It would recognise that those who have difficulty hearing or speaking want to communicate at the same times and in the same ways as others, and participants thought they deserved equality of access regardless of their difficulties. It would also allow access to services and support that are now available to others 24 hours a day.

“This [24 hour availability] is very important. After all we are human and want to communicate when we want to or need to – and not when someone else tells us it is OK.”

Deafblind, London

- It would provide a vital support mechanism to enable individuals to lead an independent and safe life.

“If something happened in the night and there is no service, what would I do? How would I communicate?”

Profoundly deaf, London

“I care for my husband who has terminal cancer. If something happens to him in the night I don’t know how to get help. At the moment services aren’t there”

Severely deaf, non-relay user, Glasgow

4.3.3. Confidentiality
Participants said that there were many situations in which they needed or wanted to have a private and confidential conversation. In such situations, the presence of a third party such as a relay assistant or interpreter was felt to inhibit or restrict communication by compromising the sense of privacy and confidentiality that participants wanted.

“It is vital. Banks, insurance companies, etc. show you no respect when you have to go through a third party. In addition there is the question of data protection.”

*Individual with speech difficulties and severely deaf, London*

“The bank won’t even talk to me when I use TypeTalk [Text Relay] because they can not be sure the person is me”

*Online group*

“My parents won’t use TypeTalk [Text Relay] as they just don’t want someone else being a part of our conversation.”

*Profoundly deaf, London*

4.3.4. **Communicating as a “real person”**

Some participants reported that the means of communication available to them now caused them to feel as though they are not communicating as a “real person”. They wanted to be able to have unmediated, real time conversations directly with the other party, to be able to interrupt, and for emotions to be “heard” and acknowledged.

“Text relay is so impersonal. Someone else is always speaking for you; interpreting what you want to say”

*Severely deaf, online group*

“Whatever the means, it needs to cope with distress, panic etc as well as lower level emotions”

*Practice Manager*

“I don’t want third parties involved. I want a direct life”

*Profoundly deaf, on-line group*

4.3.5. **Confirmation of findings from the quantitative survey**

Responses to the survey reinforced the findings of the qualitative research and highlighted the importance of providing barrier-free communications 24/7. Figure 4.1 shows that the most important aspects of service were having no disruptions, ease of use of equipment, the ability to have real time conversations, and availability of service 24/7.
Figure 4.1 Importance of different features of communication services

Figure 4.1 represents the overall response, but a number of differences were evident among different groups.

- The ability to have a real time conversation was important to more of those who were profoundly deaf (98%) than those who were moderately deaf (85%).
- Younger people were even less tolerant of disruptions to the service than older people; among respondents between the ages of 16 and 34, 100 per cent said that it was important or very important to have "disruption free" service compared with 87 per cent of those aged 55 and older.
- Text Relay users were more likely to rate real time conversations as important than respondents who were non-users; 99 per cent of Text Relay users said that real time conversations were important compared with 88 per cent of non user respondents.
- While 24/7 service was important to all respondents, those who were profoundly deaf more frequently said it was important or very important than those who are not deaf by a margin of 93 per cent to 80 per cent among those who were not deaf.
- Survey data indicated that a higher proportion of individuals in social groups ABC1, compared to social groups C2DE, thought it was important or very important to be able to interrupt conversations and to express emotions in their conversations.
  - 77 Per cent of those in social groups ABC1 indicated that it was important or very important to them to be able to interrupt calls, compared with 59 per cent of those in social groups C2DE.
  - The ability to understand and express emotions was important or very important to 86 per cent of those in social groups ABC1 compared with 74 per cent of those in social groups C2DE.
When asked what was the single most important feature of a communication service for people who were deaf or had speech difficulties, more survey respondents chose the ability to have real time conversations with no delays than the combined number selecting the second and third most popular features: having service 24/7 and being able to have private, confidential conversations without the obvious presence of a third party. Figure 4.2 shows the proportion of survey respondents who nominated each of seven features of a communications service.

Figure 4.2 The most important feature of a communications service

A review of the responses given by different sub-groups revealed a number of differences.

- Respondents who were severely deaf were more likely to consider ease of using equipment to be the most important feature (12%) compared with only 2 per cent of non deaf respondents.
- Men were more likely than women to prioritise real time conversations by a margin of 49 per cent to 37 per cent.
- 24/7 availability was the most important feature for 29 per cent of those who were severely deaf, compared to 13 per cent of non-deaf people.

4.4. Features of the equipment

Participants recognised that there was a need to incorporate some specific features into telephone equipment to take account of the needs of those who were deaf or had speech difficulties. Nevertheless, some felt that such features or adaptations should not be unique to equipment destined for use by those who were deaf or had speech difficulties. Participants who took this view were particularly concerned about modifications made to mainstream equipment after it was released for use by the general public. They identified two specific risks that
concerned them: retro-fitted adaptations might make equipment modified for use by those with speech and hearing loss incompatible with equipment used in the wider community, and adaptations and special features for those who were deaf or had speech difficulties might fail to keep up with the rapid evolution of telephone technologies that were in general use.

*I don’t want to have to rely on technology that others might not have. That is why I like SMS and email. That is what everyone else has.*

**Profoundly deaf, Glasgow**

Consequently, some participants took the view that, where possible, standard equipment should incorporate all the features necessary for use by those who were deaf or had speech difficulties.

*At the moment people have to buy their equipment via RNID or Social Services. But you have to buy without being able to see whether it is what you want. Where are the shops? Why does it always cost so much more?*

**Moderately deaf, Glasgow**

4.5. Most important features

Participants discussed a number of specific communications features and identified the following six as being the most important to them.

4.5.1. Mobile services

As discussed in Section 4.3.1, one of the most important aspects of communications services for those with speech or hearing loss was that such services should be mobile, and this has implications for the equipment that participants in this research said they wanted to have.

“All communications need to be available on the go. Why should we not have the same access and services as others?”

**Online group**

4.5.2. Alerts for incoming calls.

Some participants felt it was important to have alerts for incoming calls, including flashing lights, vibrating alerts, and amplified ringers for those with some hearing. Some participants specifically asked for mobile phones to have an option for a longer vibrating alert in addition to “lighting up” for incoming calls.

“All communications need to be available on the go. Why should we not have the same access and services as others?”

**Profoundly / severely deaf, Glasgow**

Participants wanted to know who was calling, especially in situations when it was not possible for them to hear voicemail messages. They hoped that this service would be provided with no additional charge.
“You do need more than a couple of numbers – call line identification does that”

*Profoundly deaf, online group*

“Really useful because you can work out who has called and what to do about getting in touch with them”

*Profoundly deaf, Glasgow*

“This service should be provided as “standard”. BT charge for calling line identification while mobile operators provide it for free”

*Online group*

### 4.5.3. Compatibility with hearing aids

Although some participants wanted handsets to be compatible with hearing aids, it was also recognised that this might not always be practical. Participants felt that the wide range of hearing aid technologies would make it almost impossible to provide a compatible link with telephony for all types of hearing aids.

“It is definitely a good idea – but make sure it really works with all makes – including those that fit into the ear as well as external ones”

*Acquired deafness, Scotland*

### 4.5.4. Amplified phones

Those participants who had a limited ability to hear, commonly identified being able to hear elements of conversations in some circumstances as an important part of their communications experience. Equipment that enabled an individual to hear even a bit better would be welcomed by such participants.

“The actual phone is only a small part of the communication – you need to improve technology to improve the phones so that you can hear”

*Acquired deafness, Scotland*

“Sometimes [I have] used an amplified phone but it is difficult to understand foreign accents and regional accents”

*Moderately deaf, online group*
4.5.5. **Voicemail to SMS**

Some participants thought that there were considerable benefits of having voicemail converted to text although concerns were raised occasionally about how people would be alerted to the presence of voicemail messages. Participants who thought that it would be useful wondered why voicemail-to-SMS service was not available when SMS-to-voicemail service was\textsuperscript{10}.

4.5.6. **Other features**

A number of other equipment features were explored and participants were asked to comment on their relevance and effectiveness in meeting their communication needs. These included:

- Facility to block calls
- Ring back facility
- Call waiting
- Speed dialling
- Mute button
- Hands free
- Call forwarding
- Do not disturb

In general, participants thought that these features were not especially helpful to those who were deaf or had speech difficulties, and none of them was given a high priority by participants.

4.5.7. **Survey responses to features of equipment and services**

The survey also explored the importance of different features of equipment and services for people who are deaf or have speech difficulties. Responses were largely in line with the comments made by participants in the qualitative phase of the research, except for the perceived importance of receiving incoming calls which was not as great in the qualitative responses as it was in data from the survey.

As shown in Figure 4.3, the three most important features were the ability to receive incoming calls, the ability to control the volume, and the ability to use 1471 to identify missed calls /alerts for incoming calls.

\textsuperscript{10} In fact, both of these services are currently commercially available.
Similarities in findings from the qualitative and quantitative research confirmed the perceived importance of:

- Identification of incoming calls
- Ring tone / alerts for incoming calls
- Caller display – either through CLI or 1471
- Availability on the move

4.6. Preferences between handset- and computer-based communications

Participants recognised that technology was playing a bigger and more influential role in the lives of people with and without speech and hearing difficulties. It was commonly felt by participants that the same considerations should apply when all people made decisions about the use of communications equipment. Participants tended to think that for all people, preferences were likely to reflect:

- Cost of the service and equipment
- The computer literacy of the user
• Ability to access to the relevant technology
• The context in which the call was being made; for example, communications in the workplace often benefit from computer-based communications that enable video conferencing and webinars.

Consequently it was felt that services for those who were deaf or had speech difficulties should continue to provide a choice in order to maintain equality with the hearing world in terms of decision-making environments.

“You must cater for people of different ability – especially when it comes to technology”

Profoundly deaf, Glasgow

“I can’t type and I don’t like mobiles because they are so small. Where would that leave me?”

Acquired deafness, Glasgow

Figure 4.4 reveals that participants were nearly twice as likely to prefer using relay services via a PC or Mac than using specialised equipment. This finding is in line with the qualitative research where participants frequently demonstrated a preference for using mainstream technology to specialised equipment.
Younger people (16-54) were more likely to prefer to use relay services on a PC/ Mac than older people (55+). Those from higher socio-economic groups were also more likely than those from lower socio-economic grades to prefer to use relay services via a PC or Mac (51 per cent compared to 35 per cent).

4.7. The “ideal” telephone service

There was a widespread belief amongst participants that the ideal telephone service for those who were deaf or had speech difficulties should incorporate the four service features covered in Section 4.3 and the six equipment features covered in Section 4.5. To be truly ideal, participants felt that two additional qualities should be present: affordability and fair charging structures for people who are deaf or have speech difficulties.

4.7.1. Affordability

Participants felt that those who were deaf or had speech difficulties should not be financially disadvantaged by having to pay excessive costs for communication services and equipment that met their needs. Instead, they thought that subsidies should be available to ensure that their ability to communicate was as nearly as possible on a par with the hearing community.

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11 Includes video relay, captioned telephony, text relay and faster text relay
“I cannot afford to have Text Relay as it requires a BT landline. I am a student and I just can’t afford it”

Online group

“In the US, every phone user pays a little to subsidise specialist equipment and services for the deaf community. Why can’t we have that here?”

Online group

4.7.2. Fair charging structures

Some participants thought that the current tariff system for both landline-based and mobile telephone services was not fair to users who were deaf or had speech difficulties. These participants commonly felt that providers were charging for services that were not relevant to users who were deaf or had speech difficulties and imposing extra charges for services that these participants saw as essential for this community. Participants gave examples that included the following three:

• The perceived requirement to have a landline to access text relay was felt to be unfair when an individual’s main means of communication was through the mobile network. The cost of a landline solely to access text relay was felt to be unfair and in some cases prohibitive.

• Participants noted that standard mobile charging packages included an allocation of voice minutes and a number of texts. Participants said that although the allowances for texts may seem generous to the wider community, if text is a substitute for voice communications, these allowances were often inadequate. As a result, those who were deaf or had speech difficulties said they incurred additional charges for text despite not using their allocation of voice minutes.

• Participants reported that no mobile charging packages included use of video/webcam as standard. However, some saw video as a “communication essential” that allowed them to gauge body language and emotion as well as to support individuals who sign and/or lip read.

Several participants believed that cost structures imposed by phone companies need to reflect the fact that many individuals do not use voice calls but would use extended SMS to a large extent or video services.

12 Mobile access to Text Relay is mandated but a text phone is needed
5. Text Relay service

5.1. Introduction
This chapter outlines the characteristics of users and non-users of the Text Relay service. Text Relay is a service using textphones and Text Relay assistants. Text Relay has existed in the UK since the 1980s as a national service. It enables deaf people and those with speech difficulties who have textphones or PCs with additional software to communicate through a relay assistant who speaks or types parts of conversations as required. Text Relay assistants play an obvious role in making a call. For instance, in an outgoing call by: calling the hearing person and explaining how the service works, typing the response from the hearing person to the deaf person/person with speech difficulties and repeating the text from the deaf person/person with speech difficulties to the hearing person. This chapter also looks at the advantages and disadvantages of the Text Relay service from the perspectives of users and non-users. It outlines a number of suggestions made by respondents for improving the service. The views of users and non-users have been reported separately to enable distinctions to be drawn between them. This chapter does not include perceptions about the value of text relay services, which is covered in Chapter 7.

5.2. Chapter Summary
The Text Relay service was perceived by some participants to provide a communications lifeline between deaf people and people with speech difficulties and hearing people. It was also seen as enabling deaf people and those with speech difficulties to achieve a degree of independence. The service was not thought to have been improved as much as it could have given the pace of advances in communications technology. Participants expressed a number of frustrations about the service in terms of its slow speed, perceived lack of confidentiality, being impersonal and being off-putting to hearing people. Participants reported that the availability of other modes of communication, such as email and SMS text messaging and voice/video over IP, had led some people who were deaf or had speech difficulties to reduce their use of Text Relay or stop using the service entirely.

Text Relay was most commonly used by those who were severely or profoundly deaf; 65 per cent of participants in these groups were users. Usage levels were low, at five per cent, among those who were moderately deaf. This difference is likely to be due to those who were severely or profoundly deaf being less able to make voice phone calls than those who were moderately deaf. Overall, about three-quarters of all survey respondents did not use Text Relay. This was in stark contrast to the qualitative sample where participants typically were either users or had used text relay in the past.
Key differences between sub-groups revealed by survey data

- Text Relay offers a ‘lifeline’ for those who are profoundly or severely deaf (65% are users). However, it is perceived as less beneficial by some groups e.g. who are moderately deaf (5% use) for whom other services offer greater levels of utility.
- Those aged over 55 were less likely to be aware of Text Relay than younger participants.
- Users of Text Relay were more likely to cite disadvantages of Text Relay in terms of having a low quality conversation whereas non-users were more likely to mention barriers to accessing the service.

5.3. Profile of users versus non-users

Use of Text Relay was most common among those who were severely or profoundly deaf, and as Figure 5.1 shows, there were large differences in use of Text Relay that appeared to depend on respondents’ degree of deafness. Some who were not deaf did use Text Relay, however, to communicate with those who were.

Figure 5.1 Profile of users and non-users of Text Relay

Those who were sign language users were more likely to use Text Relay than non-sign language users by a margin of 77 per cent to 13 per cent, probably because those who were sign language users were also likely to be severely or profoundly deaf. Like non-signers who were also severely or profoundly deaf, users of sign language were less able to make standard phone calls than those who were moderately deaf.
There were no differences in the profile of Text Relay users in terms of age or socio-demographic status. When the usage habits of sub-groups were examined, however, those aged under 55 were more likely to be users than those over 55. This could be due to those who became severely or profoundly deaf in later life being less willing to take up this specialised mode of communication than those who had been deaf since birth or from an early age.

Lapsed users of Text Relay had used Text Relay in the past, but reported that they no longer did. They comprised 12 per cent of survey respondents (38 people). Lapsed users were more likely to be younger; about a quarter were aged 16 to 34 and only about one in ten were 55 or older. Lapsed users were also more likely to be from higher socio-economic backgrounds: almost one in five belonged to groups ABC1 and one in twenty belonged to groups C2DE.

5.4. Advantages of Text Relay

Most of the survey respondents who used Text Relay said that it was easy or very easy to use (57 per cent), as shown in Figure 5.2. A minority of 18 per cent of users reported that they found Text Relay difficult or very difficult to use, however. There were no differences in terms of groups that found Text Relay easy or difficult to use. Although ease of use was not mentioned in the qualitative research as being an advantage of Text Relay, some participants did report that hearing people had found it off-putting and difficult to use.

Figure 5.2 Experience of using Text Relay

Q7. Thinking about your experience of the Text Relay service, how easy or difficult would you say the textphone is to use (a textphone may also be know as a Minicom)? (All who currently use text relay occasionally or regularly, 79)

Figure 5.3 shows that when asked why they had said Text Relay was useful; respondents most frequently mentioned its familiarity through current use and its perceived effectiveness as a means of communication.
Figure 5.3 Useful aspects of Text Relay

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>System that I use now</td>
<td>17%</td>
</tr>
<tr>
<td>Effective - gives me the ability to communicate</td>
<td>17%</td>
</tr>
<tr>
<td>Useful</td>
<td>16%</td>
</tr>
<tr>
<td>Satisfactory service</td>
<td>10%</td>
</tr>
<tr>
<td>Most suited for my needs</td>
<td>9%</td>
</tr>
<tr>
<td>Easy to use / practical to use</td>
<td>6%</td>
</tr>
<tr>
<td>Already have the equipment / familiar with service</td>
<td>6%</td>
</tr>
</tbody>
</table>

Q37. Which, if any, of these services would be the most useful to you? **Text relay** Why? (All answered, 82). All reasons given by more than 5%.

Text Relay users who were deaf or had speech difficulties and took part in the qualitative research thought the principle advantage of Text Relay was that it enabled deaf people and those with speech difficulties to communicate relatively independently with a wide range of people and organisations without relying on friends, family or support workers for assistance.

“**Helps me to be independent. Before relay I always had to ask someone else to make calls for me**”

*Deafblind, London*

“I couldn’t live without it, I just can’t imagine living without it because years ago I used to have to ask my mum to make the phone calls for me but... I’ve used it from day one, when it first opened.”

*Deaf (level not specified), Manchester*

"**I think Text Relay, to be fair, when it started, it really saved my life. I had to arrange the funeral for my last surviving relative at exactly the time Text Relay started, so it was brilliant for me."**

*Profoundly deaf, London*

Some participants in the qualitative research felt that text relay enabled greater levels of understanding than a standard phone call for people who had some hearing but experienced difficulty hearing entire conversations. Because all of the conversation from the hearing person
was converted to text, Text Relay users could pick up the parts that they might have been unable to hear if it were a standard phone call.

“When I ring people I follow no more than 50% if that and I’ve got people at the other end of the phone repeating themselves over and over again or even changing what they say so I can understand it. That makes me feel so stupid but with Text Relay I do catch up”

Severely deaf, London

“I get text of what the other person says, so I can use it as an alternative when I find someone difficult to understand in a normal phone call”

Severely deaf, Glasgow

Some participants felt that text relay afforded a greater degree of anonymity than using an interpreter or friend or family member since it enabled individuals to communicate without having to reveal their identity to the relay assistant. The deaf community was described by several participants as being very small but generally well networked. Deaf participants occasionally commented that they knew some of the interpreters who assisted them as well as other deaf people. In contrast, some participants noted that Text Relay assistants were based in Liverpool and did not communicate with them face-to-face. As a result, these participants felt that text relay provided a more anonymous service than services requiring an interpreter. Some participants said this greater sense of anonymity allowed them to communicate more openly than if an interpreter they knew where involved. In the latter case, they said they were likely to adapt their conversation to reveal less emotion or avoid discussing personal details, for example.

“Allows me to remain anonymous which none of the other services do”

Profoundly deaf, London

"I can have a conversation with my doctor without having to give away embarrassing details to a friend to make the call for me.”

Online group

Participants who were non-users tended to be vague about the advantages of the Text Relay service. Some recognised that text relay helped some deaf people to communicate, and non-users occasionally said that text relay would be most useful for people who had English as a first language as opposed to BSL because the service only used the English language.

5.5. Disadvantages of Text Relay

5.5.1. Survey respondents’ views of Text Relay’s disadvantages

Survey respondents and participants in the qualitative interviews and discussions had broadly similar perceptions of Text Relay’s disadvantages. As shown in Figure 5.4, four in 10 survey participants believed that it was hard to convey emotion using Text Relay, which echoed views
expressed in the qualitative phase about its impersonal character being a disadvantage. Almost four in ten survey participants (38 per cent) also felt that the lack of privacy with a relay assistant present was a disadvantage of using Text Relay. These complaints were more common among those with severe or profound deafness and those who used sign language. Both of these groups were also more likely than average to use Text Relay.

**Figure 5.4 Perceived disadvantages of Text Relay**

Those who were severely or profoundly deaf sometimes mentioned that Text Relay calls had been refused by those they had tried to call using the service, whereas no moderately deaf or hearing participants reported this. Similarly, only those who were profoundly deaf mentioned that hearing people did not like using Text Relay.

Some differences in attitudes to Text Relay were found to be age-related. Those aged 55 and older were less likely to be aware of Text Relay than those who were under 55. Among those aged 35 to 54, 31 per cent were unaware of Text Relay but the figure fell to 12 per cent among those aged 16 to 34. Compared to older survey respondents, younger people, aged 16 to 34, were more likely to give importance to being able to have a real time conversation and having 24/7 access.

Figure 5.5 shows that most Text Relay users who were surveyed had some experience of interruptions to the service. For 20 per cent, this was said to be a problem with all or most of their Text Relay calls. This was broadly in line with the qualitative findings where some participants felt that interruptions reduced the efficacy of the service.

Almost one in five respondents (incorrectly) believed that the service was not available 24 hours a day, seven days a week (24/7).
5.5.2. Users of Text Relay who were deaf or had speech difficulties: qualitative findings on text relay’s perceived disadvantages

In the qualitative phase of the research, some deaf users of the service believed that Text Relay had a number of disadvantages that limited its efficacy. The main disadvantage of Text Relay reported by participants was that it offered a poorer communications experience compared to that experienced by hearing people. A variety of perceptions and experiences were cited to support this view, some of which appeared to involve misunderstandings. Some participants were frustrated because, they said, Text Relay had not been updated in line with developments in wider telecommunications technology. Some deaf people and those with speech difficulties reported that they and others with similar difficulties had been held back in their ability to communicate with hearing people in professional and personal contexts. Some participants were not aware that the service could be used on a mobile phone or via a computer. Some respondents reported that Text Relay was incompatible with webinars (online seminars) and conference calls, which were seen to be important media for communications in the modern working environment.

“You cannot participate in webinars or online courses (where phone is used at the same time- - this is something the company often does, so I miss out on a lot of useful training and information, which is very frustrating). These things are increasingly used with international companies.”

**Profoundly deaf, Glasgow**

“It’s a real problem that you can’t use Text Relay on the move”

**Deafblind, London**
The perceived disadvantages that were the main sources of frustration for users are reviewed in this section. Input from the qualitative research, which is presented here, provides greater insight into the survey results reported in Section 5.5.1.

**Text relay conversations could seem slow and cumbersome**

The slow speed of text relay service was widely recognised by participants who used it. They said there were several reasons for this. How the service worked had to be explained to the hearing person before a conversation could begin. It took time to type out both sides of the conversation. Some participants also mentioned that they frequently had to wait for a relay assistant to become available before making a call. Some reported experiences of call centres that would not initiate or accept Text Relay calls because their length was expected by the call centres to exceed maximum call lengths, which it was said might be set at levels as low as five minutes. Participants said that this resulted in reduced access to services that deaf people and those with speech difficulties needed to access as readily as those without these difficulties, e.g. contacting utility companies including phone companies.

"You start as a second class citizen and know the call is going to take 2 or 3 times longer than a normal conversation."

**Online group**

Some participants reported that companies and organisations were increasingly unwilling to accept Text Relay calls because of:

- Policy, e.g. time limits in call centres, not allowing incoming 1-8001 numbers (Text Relay prefix);
- Technology, e.g. incompatible with some automated switchboards (IVR systems) since there is not enough time for the relay assistant to relay all of the options and for the deaf person/person with speech difficulty to choose the most appropriate option;
- Attitudes, e.g. reception staff not understanding the Text Relay service, partly because of the way that Text Relay calls are introduced by the relay assistant.

**Text relay conversations could seem impersonal or unnatural**

Some participants felt that the service was impersonal since it relied on a relay assistant to relay the conversation from the deaf person/person with speech difficulties to the hearing person. Some also felt uncomfortable relying on the relay assistant in personal communications since they felt it would come across to the hearing person as impersonal and odd coming from the relay assistant. Some participants also said that it was difficult to understand the emotional pitch of the conversation since they are unable to tap into the tone of the conversation. Other communications services such as captioned telephony were perceived to enable deaf people who had some hearing to appreciate the tone of voice of a conversation even if they could not pick up some or all of the words used by the hearing person.

It was not uncommon for participants to say that they felt relay assistants had a very obvious presence in the Text Relay process, which tended to reinforce their feeling of detachment from
the conversation. If the relay assistant was not of the same gender as the deaf person/person with speech difficulty, some said this could lead the hearing person to think that the deaf person/person with speech difficulty was of a different gender. Some deaf people claimed that the relay assistant paraphrased their messages to the hearing person or failed to relay information that they thought was unimportant. This had the effect of depersonalising the message or communicating confusing content.

"The real problem is not being able to see the person at the other end of the phone, you can't tell if they are happy or sad."

_Profoundly Deaf, London_

“When the operator says, “oh, you don’t want to hear everything the caller has typed, they are just ranting,” how can I be confident that I have been told what the caller wants me to hear?”

_Call centre operator, Glasgow_

“I need to use Text Relay for business and it is often impossible to get the operator to use the exact words that I have used to describe an operating system. Often this is because they don’t understand them, but instead of just using the words that I use, they try to guess what I mean”

_Profoundly deaf, London_

Some participants in the qualitative research who were deaf or had speech difficulties and were text relay users also felt that Text Relay did not facilitate a natural, free-flowing conversation because:

- Neither party can interrupt the conversation;
- Each party has to wait for the other’s reply to come to them through the text or voice interpretation;
- The hearing person has to say ‘go ahead’ when they have finished their reply;
- Users feel they need to condense the conversation to reduce relay time;
- The relay assistant typically changes every 30 minutes.

Additionally, the connection was reported to be lost on some calls which resulted in a new call having to be set up. Participants thought that connections were lost because the relay assistant needed to take an emergency call, failings of the textphone technology and computerised systems cutting calls off when silences arose during the waiting time that was inevitably part of Text Relay calls. Others reported that it could be difficult to remember to switch between text and voice, which was frustrating because they would then miss some of the reply. There were also occasions, some said, when the text received did not make sense.

"Text sometimes appears jumbled up, making it difficult to read what the person has said."
Online group

“If I want to use my own voice I have to keep switching between data and voice modes, and sometimes it's easy to forget, or not have pressed the button fully”

Severely deaf, Glasgow

"Sometimes it cuts off when an emergency call comes. Sometimes when I phone somebody it's ages to get through if there is no operator on the other end, so we're kept waiting"

Profoundly deaf, London

Text Relay could seem to be off-putting for hearing people or to reflect badly on users

Some participants who were deaf or had speech difficulties thought that the Text Relay service could be off-putting to some hearing people, mainly in four ways:

- The initial message explaining how the service works could be mistaken for an automated or a ‘nuisance’ call;
- The slow speed of the service could try the patience of some hearing people;
- The perceived rigidity and lack of flow in the conversation e.g. having to say ‘go ahead’ after the message and the inability to interrupt, could make the conversation seem unnatural and unsatisfactory to some hearing people;
- A perceived need to keep conversations that could be lengthy as brief as possible or use more direct language to speed up the call could change the tone and the rapport it was possible to establish in Text Relay conversations.

Some participants who were deaf or had speech difficulties believed that the Text Relay service reflected badly on them as a deaf person/person with speech difficulty by making them appear to have a greater level of disability than they actually had. Others, less commonly, felt that the service made them “look stupid” due to the limitations of the service itself.

“It can easily give a bad impression of me to people who do not know me (particularly an issue when applying for jobs, or if I need to talk to a customer). They (the other person) will usually assume at the start I’m very deaf, and in some way my intelligence is limited”

Profoundly deaf, London

“How can I be confident that the phone number, bank card number, etc have been correctly exchanged? If I can hear as well as read, I’m more confident that I’ve got the info correctly”

Severely deaf, Glasgow
Other less commonly mentioned disadvantages of text relay

Some participants who were deaf or had speech difficulties said that organisations such as banks and insurance companies would not always accept information via third parties including Text Relay assistants. Participants said that this made it difficult for them to communicate with these organisations.

Some participants had found that the quality of the Text Relay service was inconsistent, varying by relay assistant. They reported that some relay assistants had very good typing speeds and some were very helpful, but others were less helpful and some had slow typing speeds. Some users also believed that the service had deteriorated in recent years and reported being cut off more frequently and experiencing more instances of a relay assistant not being available.

"Some of them are fantastic typists and interpreters and (with) others you are just having to figure out the words“

*Profoundly deaf, London*

The Text Relay service was felt by some participants to rely on people being able to use English. For deaf people who do not have English as a first language, for example BSL (British Sign Language) users, it was challenging to communicate using the service because they were unable to express themselves as clearly or as fully as they would have liked.

“I have friends who refuse to use Text Relay to communicate because they are too ashamed of their English”

*Profoundly deaf, Glasgow*

5.5.3. Non users of Text Relay

In our sample, respondents who did not use text relay were predominantly hearing people, particularly friends and family of those who were deaf or had speech difficulties, and those who were moderately deaf rather than severely or profoundly deaf. These respondents most frequently cited lack of awareness of Text Relay and not having the equipment as barriers to using Text Relay.

Figure 5.6 shows that non-users were less likely to mention some of the less tangible aspects of text relay as disadvantages such as difficulty in understanding and conveying emotions and not being able to interrupt conversations. Users were more likely to express frustrations about the quality of text relay conversations, such as the inability to interrupt (76%) and difficulties in conveying emotions (67%).
Low awareness was the main reason why survey participants had not used the Text Relay service, as shown in Figure 5.7. There were no differences according to hearing loss or demographics.

While this issue was mentioned by participants in the qualitative research as being a disadvantage for the wider population of hearing and deaf people, it was not an issue that had affected them directly. The other reasons for not using Text Relay, according to survey participants, related to the equipment not being available either to the non-user\(^3\) or to a person who was deaf or had speech difficulties they wanted to contact. Again, this issue was mentioned by participants in the qualitative research, but it was not seen to be as important as other issues such as the inability to have a real time conversation or display emotions.

\(^3\) The hearing person does not, in fact, need any special equipment (just a telephone) to receive text relay calls
\(^*\) Three percent of Text Relay users claimed not to be aware of the Text Relay service; it is likely that these people answered the question incorrectly
Survey respondents included lapsed users of Text Relay; these were people who previously used the service but no longer did. Figure 5.8 shows that the most frequently mentioned reason for no longer using Text Relay was that calls were too slow. The second most frequently given reason, “I don’t need it anymore,” suggests that other technologies may be replacing text relay for some who used to use it. This is given added weight because 18 per cent of lapsed users said they now tended to use text messaging and email instead of text relay and another 18 percent said it was easier to reach people through other avenues. Multiple responses to this question were allowed, so these percentages cannot be added up, but they convey a picture of newer technologies beginning to attract former users of text relay.

Experiences of calls being refused or ignored were cited by 21 per cent of lapsed users while 18 per cent attributed their lapsed status to difficulties in using the equipment. These findings are broadly in line with the qualitative findings.
Figure 5.8 Reasons for not using Text Relay (lapsed users)

Q10. If you have used the Text Relay service (which used to be called Typetalk) in the past but no longer use it now, why is that? MULTICODE - UNPROMPTED. Top reasons (All who stopped using text relay, 38*)

*Apply caution due to small sample size

5.6. Suggestions for improving Text Relay

Three quarters of survey respondents who were users thought that Text Relay could be improved in some way although 24 per cent said that no improvements were needed. Figure 5.9 shows that the main suggestions for improving the service were faster relay, finding a way to allow emotion and tone to register, and making the system less confusing by increasing automation. These suggestions were broadly similar to those made by participants in the qualitative phase.
In the qualitative phase, users and non-users made many suggestions for improving the Text Relay service. These included improving functionality, using technology to add features, making it easier for hearing people to use Text Relay, improving the way relay assistants work, improving accessibility, and reducing cost or increasing competition in the marketplace. Suggestions made by participants in the qualitative research have been précised and grouped under these headings. The order in which they are set out below is not intended to reflect their importance or the frequency with which they were mentioned, but as a group they are consistent with survey findings.

**Improving the functionality of the service**

- Have a real time service/increase the speed of the service;
- Use voice recognition technology to speed up the service and potentially accuracy;
- Have the ability to interrupt the service/ the conversation;
- Have the ability to hear voice at the same time as receiving text;
- Have a facility to save the text and read it later;
- Have a record of what was said by the relay assistant to the hearing person.

**Using technology to add features**

- Include a webcam feature;
- Integrate text relay communications with other media, e.g. Facebook;
- Have the ability to send a text message to a landline that could be converted to speech without the need for a relay assistant;
- Implement a way of conveying emotions in the text;

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**Figure 5.9 Users suggestions for improving Text Relay**

Q9. Thinking about the Text Relay service as it currently is, is there anything that the Text Relay service doesn’t have that you would like it to have? This could be the ability to do something specific or a technical feature. MULTICODE - UNPROMPTED. Most frequently cited suggestions. (All who currently use text relay occasionally or regularly, 79)
• Have one button which could be pressed for emergencies\(^\text{14}\);

**Making it easier for hearing people to use the service**

• Make sure that if you leave the text phone number for a call back, it will be understood that 1-8-002 is a valid UK prefix that must be used to call a text phone; make it possible to leave a Text Relay number without it being perceived as an overseas or premium rate number;

• Have a shorter prefix to make it easier to make/receive calls;

• Develop a method where people can leave the deaf person a text answerphone message;

• Improve the introduction script to make it less off-putting to recipients of the call.

**Improving the way relay assistants work**

• Relay assistants should let the deaf person/person with speech difficulties know the reasons for delays in the service;

• Relay assistants should indicate whether they are male or female\(^\text{15}\) for the deaf person/person with speech difficulties, who may want to clarify their own gender to the recipient of the call during the conversation;

• Relay assistants should complete a conversation rather than stopping part way through if the call lasts longer than 30 minutes;

• Relay assistants should be able to type at an acceptably efficient speed.

**Increasing access to the service**

• Make Text Relay accessible through browsers on all computers, including Apple Macs;

• Increase awareness that the service is accessible from mobile networks;

• Increase awareness of the software that enables the service to be used through a PC and where it can be downloaded free (Text Relay website);

• Increase awareness of the service amongst deaf people/people with speech difficulties and hearing people;

• Increase information about discounts for using the Text Relay service on phone bills.

**Reducing the cost of using the service**

• Use IP networks, which would be much cheaper than a phone line;

• International calls should be the same cost as a standard phone call as well as being accessible by internet everywhere in the world;

• Have the same call cost rate during the day as off peak calls for Text Relay users\(^\text{16}\).

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\(^{14}\) Some textphones already offer this feature.

\(^{15}\) Relay assistants will already do this on request.

\(^{16}\) Note that discounts are applied to all text relay calls to compensate for the increased call length.
Increasing choice/competition into the marketplace

- Open up the relay marketplace to encourage improvements to the service and hardware.
6. Response to other potential communications services for people who are deaf or have speech difficulties

6.1. Introduction
This chapter looks at responses to some of the potential communications technologies that might be used instead of text relay by people who are deaf or have speech difficulties. In the qualitative phase and in the survey, reactions were sought to three communications technologies: a faster version of the existing text relay service, captioned telephony, and video relay services. Participants in the qualitative research were given a visual representation of how each of these services would work; those who were blind as well as deaf received a verbal explanation of each technology through interpreters. Survey respondents were offered a visual diagram and a written description of each of the services before being asked for their reactions. In this chapter we describe the perceived advantages and disadvantages of each of the technologies. The perceived value of these services is discussed in detail in chapter 7.

6.2. Chapter Summary
Participants felt strongly that there was no ‘one size fits all’ communications technology that would be suitable for all people who are deaf or have speech difficulties. Each of the technologies discussed was perceived to have advantages and disadvantages for participants having different needs and preferences. Overall however, captioned telephony and faster text relay were regarded as likely to be most useful to the greatest number of the population of those who were deaf or had speech difficulties. This was because BSL users were perceived by some participants to be a minority sub-group of the deaf community (as they were in our sample).

Participants in the qualitative research, most of whom had had no experience of captioned telephony, expressed strong interest in this service because they thought it would satisfy a number of needs that were not met by Text Relay. These participants hoped for or assumed benefits included, for example, the ability to hear the speaking person for those with some hearing, and increased speed and improved accuracy due to the use of voice recognition software trained to the operator’s voice. Those who had used captioned telephony in the past reported that it was acceptable to banks, insurance companies and others who might resist accepting input through third parties such as text relay assistants. This was seen to be a considerable benefit.

Faster text relay was deemed to be an improvement over the current slow service, but many of the disadvantages of text relay were seen to remain, e.g. difficulty of getting a relay assistant, the obvious presence of a relay assistant in conversations, lack of relay assistant continuity and difficulties in connecting to automated telephone systems. Nevertheless, a text relay service that could operate at greater speed was attractive.

In the qualitative phase, where those with profound and severe loss of hearing and speech were more common than in the survey, video relay was perceived as having benefits mainly for those
who could sign. Survey data, however, revealed broader support, including support from deaf people who did not sign and hearing people who would benefit from being able to communicate with sign users by telephone. Participants in the qualitative research expressed some concern about the cost of a video relay service, ease of use of the equipment, the need for an appropriately lit environment and confidentiality. Some participants thought it was important to understand that the deaf community was small and that individuals using video relay were likely to know the interpreters. These participants, therefore, felt that video relay might not afford the same degree of anonymity that is available to the wider population.

The next three sections set out overall reactions to each of the three services and their perceived advantages and disadvantages.

**Key differences between sub-groups revealed by survey data**

- Those who have speech and some hearing perceive the most benefits from captioned telephony over text relay, since they feel that this service offers them an experience that is closer to a ‘real conversation’ due to the increased speed and being able to hear some of the conversation.
- BSL users were twice as likely as non-signers to regard video relay as the most useful relay service, by a margin of 35 per cent to 16 per cent.
- Those who were not deaf thought that a faster text relay service would be the most useful to them.

**6.3. Overall view of three alternative services**

Overall, captioned telephony and faster text relay were considered the most useful services to the greatest number of people in our sample, as shown in Figure 6.1. Captioned telephony was more likely to be preferred by survey respondents with severe or profound hearing loss, whereas non-deaf users thought faster text relay would be more useful. This finding was borne out in the qualitative findings, where a high proportion of participants were severely or profoundly deaf and captioned telephony received more support than faster text relay or video relay. In the survey, 43 per cent of those who were not deaf thought that faster text relay would be the most useful service, compared to only 19 per cent of survey respondents who were profoundly deaf and 24 per cent of those with any level of deafness. Amongst BSL users in our sample, video relay was rated as the most useful service.
Video relay was more than twice as likely to be considered to be the most useful relay service by BSL users to non-signers (35% compared to 16%) Video relay is used by people who use sign language so it is unsurprising that it is more popular with those who sign.

6.4. Faster Text Relay service

Approximately half of survey respondents thought that faster text relay would be quite useful or very useful to have, as shown in Figure 6.2. Faster text relay was perceived to be most useful by those who currently used Text Relay (81%), those who were severely or profoundly deaf (65%) and sign language users (72%). Some individuals, however, are likely to be included in more than one of these categories.
6.4.1. Perceived advantages

Participants in the qualitative research thought the main benefit of faster text relay would be an increase in speed compared to the current system, which could improve the dynamism and flow of conversations and reduce the duration, and hence the cost, of calls. Some thought that having a faster service would result in an improved experience for the hearing person, making them more positively disposed towards text relay and more willing to use it. Others disagreed, believing that the existing disadvantages of text relay, including its impersonal quality and the relay assistants’ presence, would continue to put people off using the service.

"Quicker text relay might make the conversation seem more 'normal'."

*Online group*

"I don't think it will make any difference because hearing people do not like it."

*Online group*

Some participants thought that the accuracy as well as the speed of the Text Relay service could be improved by using voice recognition software rather than relying on relay assistants to type the conversation. Others were concerned that the quality of voice recognition software could be poor, resulting in a less accurate service.

Some thought it was beneficial that faster text relay service could use existing equipment, and as a result, would not require retraining or the need to buy new equipment.
"I’m happy with a faster, better version of text relay. I want to be able to use it on my computer"

Partially deaf, London

In line with the qualitative findings, survey respondents also saw increased speed and shorter conversations as the chief benefit of a faster text relay service, as shown in Figure 6.3.

**Figure 6.3 Reasons why faster text relay is useful**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quicker speed / time saving</td>
<td>47%</td>
</tr>
<tr>
<td>Would be an improvement on the current service</td>
<td>19%</td>
</tr>
<tr>
<td>Useful / indispensable</td>
<td>9%</td>
</tr>
<tr>
<td>Would try it / use it / interested as another option to communicate</td>
<td>6%</td>
</tr>
<tr>
<td>Best service / most suited for my needs / happy with this</td>
<td>5%</td>
</tr>
</tbody>
</table>

Q37. Which, if any, of these services would be the most useful to you? Faster Text Relay Why? (All answered, 85) All reasons given by more than 5%.

**6.4.2. Perceived disadvantages**

Participants in the qualitative phase thought that the main disadvantage of a faster text relay service was that it did not appear to address problems posed by the current text relay system. This was disappointing for some, who wanted to see improvements in other aspects of the service such as the difficulty of getting relay assistants; the obvious presence of a relay assistant in conversations, and the lack of relay assistant continuity.

**6.5. Captioned Telephony**

Overall, 39 per cent of survey respondents thought that captioned telephony would be useful to them. This figure was higher amongst those with a severe or profound hearing loss; 62 per cent of this group thought it would be very or quite useful to them. Nearly half of those with severe or profound hearing loss thought that captioned telephony would be very useful to them (45%). This was in keeping with the strong levels of support that this service received in the qualitative research, where participants were predominantly people with severe or profound hearing loss who stood to gain from having a facility like captioned telephony.
Some participants in the qualitative phase of the research had had experience of using captioned telephony, including some who had used it when it was commercially available in the UK and funded by the Access to Work scheme for some users.

6.5.1. Perceived advantages

Captioned telephony was thought to offer a considerably enhanced communications experience compared to text relay. In the qualitative research, captioned telephony was particularly valued by those who were able to use their voice, especially if they had some hearing. Participants thought that the most important benefit offered by captioned telephony was the possibility it offered of a communications experience that was very close to that experienced by hearing people.

“I think (text relay) can feel artificial at times and I think it would improve the conversation between each other which is really important because it makes each side of the party feel like it’s real as if you were having a voice telephone call but using a different way”

Deafblind, Surrey

Captioned telephony was thought by some participants to enable a more natural conversation than text relay because it occurs in near-real-time and allows a dynamic conversation to take place. It is possible to interrupt the conversation and people will be aware of pauses in the conversation, allowing participants to respond in a more fluid manner than the current text relay system.

“I was able to have a conversation and it came up in text what was being said so if I can’t catch the conversation then a couple of seconds later it would come up on the screen and that way I could keep up the conversation”

Severe to profoundly deaf (former user of captioned telephony), London

“It would allow a more intimate conversation especially if talking with close family and friends.”

Online group

Some of those who were partially deaf thought that being able to hear some of the conversation as well as seeing text considerably enhanced conversations; they said they were able to follow conversations far better than if they relied solely on their poor hearing. In addition, being able to hear the tone of the other person’s voice, if not a lot of specific words, was felt to be important in judging the mood of the other person, which they said could be very difficult when relying solely on text.

“It is great to hear the other person, which speeds the conversation up, and also gives you an indication of the person’s mood, etc. Also you can tell when they pause and therefore judge when to interrupt”
Some participants felt that captioned telephony would be more acceptable to hearing people than a text relay call for three reasons. They thought the hearing person would be able to have a more near to real-time conversation with the person who was deaf or had speech difficulties, there would be no need to interact with an operator and regular telephone numbers could be used. As a result of captioned telephony’s greater acceptance by hearing people, these participants felt that this service offered them greater levels of independence than text relay.

“I think this service could make deaf people more independent rather than having to rely on others to make phone calls.”

Some also believed that captioned telephony would alleviate difficulties that were currently experienced when using the Text Relay service. Automated, call direction menus might be less problematic, they thought, because captioned telephony would be quick enough to enable users to see all of the options and select the appropriate option before being timed out. Others anticipated that captioned telephony would make it possible for them to take part in conference calls and webinars (online seminars) due to the near real time transfer of text and voice. Yet others expected that the service would overcome the difficulty of organisations refusing to accepting calls from or information given by ‘third party’ text relay assistants.

Survey respondents who believed that captioned telephony would be useful thought that it would lead to better conversations, that it was good to have the text as a back up, and that it would be quicker than other services. These reasons, shown in Figure 6.4, were similar to those identified in the qualitative interviews and group discussions.
6.5.2. Perceived disadvantages

Captioned telephony was seen as having very few disadvantages by participants in the qualitative phase of the research. Occasionally, someone who had experienced captioned telephony expressed concern about delays between picking up the phone to take a call and service beginning. This resulted in being without text for the start of the conversation, which could be confusing and restrict the conversation even when text began to appear.

“Sometimes you have the first 10 seconds of a call without text”

Some were concerned about the accuracy of voice recognition software due to experience of using it in other contexts. When it was explained that the software would have ‘learned’ the voice of the operator, accuracy became less of a concern.

Because captioned telephony works from speech, some participants thought it was unsuitable for people who did not have speech, whose speech was limited or difficult to understand and who did not speak English. Others thought it would not be possible for those who were deafblind and used Braille to use it unless the software was compatible with Braille readers.

Because the service involves an operator, some had concerns about lack of confidentiality when using captioned telephony. However, the level of concern was minor compared to similar concerns about other relay services, perhaps because the operator would not be seen or heard by users of captioned telephony. For example, one participant who had used captioned telephony believed, incorrectly, that the service did not have an operator because voice recognition software was used to convert voice to text.
6.6. Video Relay service

Overall, 39 per cent of survey participants said that video relay would be useful to them, as shown in Figure 6.5. Those who were more likely to think that it would be useful were sign language users (66%) compared to non-sign users (32%) and those who are severely or profoundly deaf (52%). Non signers who said that the service would be useful are likely to perceive it useful to be able to speak to BSL users.

Figure 6.5 Usefulness of Video Relay

Q36-1. Considering the technologies that are available to help deaf people communicate, I would like you to think about how useful the following services would be to you? Video relay (All answered)
6.6.1. Perceived advantages

As with captioned telephony, participants in the qualitative research felt that the main benefit of video relay compared to text relay would be the ability to have conversations that were closer to those experienced by hearing people. They thought this could be achieved in three ways.

- Video relay conversations would be quicker than text relay conversations, resulting in improved flow.
- Being able to see the interpreter would enable the deaf person to feel the emotional content of the discussion.
- Having the ability to communicate in their first language, British Sign Language, would make users feel more comfortable and confident than when communicating in English.

“I think it is really important that it’s available for people who use BSL because it is the thing about the language structure being different as well and I imagine that for a lot of BSL users it will open up clearer communication for them”

Deaf and blind person, Surrey

“It's absolutely imperative that they have video relay. Text is no help to them at all, they can’t relate to it.”

Profoundly deaf, London

Some participants believed that video relay would enable them to have more flexible access to interpreters and interpretation facilities than they currently have because video relay avoided the necessity of having to book interpreters. Some also thought video relay would be more cost-effective than using interpreters.

Some BSL users were more likely to describe the service as useful or indispensable than all respondents.

Figure 6.6 shows that among survey respondents who thought video relay would be useful, the main benefit that was hoped for or assumed involved being able to see who you are speaking to, which would enable you to read sign language and see facial expressions. Video Relay is a service designed for BSL users. The BSL user sees the BSL interpreter only, and therefore, can not lipread or see the facial expression from the hearing person.
6.6.2. Perceived disadvantages

The disadvantages that participants associated with video relay concerned its costs, technology, functionality, and confidentiality.

Some participants were concerned that the equipment and calls would be so costly as to limit or prohibit use of the system if deaf users paid the full cost of the service. Concerns were also raised about the quality of the image (due to broadband speed) because participants said that a poor quality image would make it very difficult to interpret signing.

"It's sometimes too slow and you don't get the fluency"

Deaf (level not specified) Manchester

Some thought that video relay service operators would have a far greater presence in conversations than operators would in other potential interpretation services for deaf people because signing users would see and be seen by the interpreters, to whom they signed. Some felt that this degree of interpreter presence would be intrusive. This concern was heightened among...
participants who believed that few BSL interpreters existed. Some participants said they would not feel comfortable discussing personal or confidential issues through an interpreter who was familiar to them. For participants with these concerns, video relay did not seem to offer the same degree of anonymity that was available to the wider population or to users of other services such as captioned telephony and text relay.

“In the “small world” of BSL interpreters – you would be likely to know the person that is interpreting. This would not be appropriate in particular situations”

Profoundly deaf, Glasgow

Occasionally, participants expressed concern about the variability of interpreters’ BSL skills and regional variations in signing, which led to worries that errors in interpretation might be made.
7. Valuing services

To help inform Ofcom’s cost-benefit analysis of communications services for deaf people and those who have speech difficulties, the cash value attributed by research participants to text relay service was compared to the cash value they attributed to three other communications services: a faster version of text relay, captioned telephony and video relay.

The following methods were used in assessing the value of these services:

- Respondents were asked to choose between the service and a cash payment.
- Those who preferred cash were asked at what price they would prefer the service, while those who preferred the service were asked at what price they would prefer cash.
- Respondents were asked how much they would use each service if there were no charge for usage.
- Respondents were asked, if they were given an unconditional cash payment, how much of that payment, or their own money, they would spend on each service (for a given price per minute of usage).

In interpreting these results it should be borne in mind that:

- Some participants believed that they had a basic human right to have barrier-free communications services and that price and value was less relevant in this context. Many participants had not used some or all of the technologies being tested and were, therefore, unable to discuss their value in the light of real-life experience. The services were carefully explained to everyone, but that is not the same as actually using them.
- Some participants may not have fully understood explanations that were given about how the technologies would work. Some of the responses to questions about the value of services in the qualitative phase revealed that occasionally participants misunderstood or failed fully to grasp how the services worked despite receiving explanations and being able to ask questions.
- Participants made judgements about value in a number of different ways in the qualitative research. Some gave a value based on how much other services currently cost while others gave values based on how much benefit they thought they would gain from the service.
- Deaf people on a low income might be more likely to take the cash rather than spend it on calls.

Questions about the value of services were asked during the qualitative and quantitative survey phases of the research. The research instruments that were used appear in Appendices 3-8. Survey respondents and qualitative research participants were asked to make a hypothetical decision whether they would opt for a cash payment or to make a set number of short calls using
each type of service presented. The purpose was to establish the value to survey participants of the service, by finding the level of cash payment at which they would be indifferent between taking the cash and taking the calls. For each service, respondents were offered a “high”, “medium” or “low” cash payment, and asked whether they would prefer to take the cash or the calls. Payment levels (high, medium or low) were assigned randomly to respondents so that each of the three cost levels was used in one-third of survey interviews. In the survey and qualitative interviews, participants were also asked how often they would use the services if they were provided free of charge.

7.1. Relative perceived value of communications services

7.1.1. Summary
When offered payments ranging from £15 to £120 per month, between 50% and 70% of respondents said they would take the cash rather than each of the proposed services.

7.1.2. Text relay

Table 7.1 Text relay services
Respondents were offered the choice of a cash payment or 15 five minute text relay calls per month.

<table>
<thead>
<tr>
<th>Cash payment offered</th>
<th>Sample size</th>
<th>% of respondents who accepted the cash</th>
<th>% of respondents who accepted the calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>£15 (low price)</td>
<td>100</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>£30 (medium price)</td>
<td>102</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>£60 (high price)</td>
<td>97</td>
<td>61%</td>
<td>39%</td>
</tr>
</tbody>
</table>

7.1.3. Faster text relay

Table 7.2 Faster text relay services
Respondents were offered the choice of a cash payment or 15 faster five minute text relay calls per month.

<table>
<thead>
<tr>
<th>Cash payment offered</th>
<th>Sample size</th>
<th>% of respondents who accepted the cash</th>
<th>% of respondents who accepted the calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>£20 (low price)</td>
<td>98</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>£40 (medium price)</td>
<td>102</td>
<td>69%</td>
<td>31%</td>
</tr>
<tr>
<td>£80 (high price)</td>
<td>95</td>
<td>63%</td>
<td>37%</td>
</tr>
</tbody>
</table>
7.1.4. Captioned telephony

Table 7.3 Captioned telephony services
Respondents were offered the choice of a cash payment or 15 five minute captioned telephony calls per month.

<table>
<thead>
<tr>
<th>Cash payment offered</th>
<th>Sample size</th>
<th>% of respondents who accepted the cash</th>
<th>% of respondents who accepted the calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>£25 (low price)</td>
<td>98</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>£50 (medium price)</td>
<td>100</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>£100 (high price)</td>
<td>95</td>
<td>56%</td>
<td>44%</td>
</tr>
</tbody>
</table>

7.1.5. Video relay

Table 7.4 Video relay services
Respondents were offered the choice of a cash payment or 15 five minute video relay calls per month

<table>
<thead>
<tr>
<th>Cash payment offered</th>
<th>Sample size</th>
<th>% of respondents who accepted the cash</th>
<th>% of respondents who accepted the calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>£30 (low price)</td>
<td>27</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>£60 (medium price)</td>
<td>18</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>£120 (high price)</td>
<td>17</td>
<td>53%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Very few survey respondents answered questions about the value of video relay services, as they were only asked to those who were BSL users or used another sign language. Therefore, the data in table 7.4 should only be seen as indicative.
7.2. Expected frequency of use of services

Figure 7.1 shows that at least half of all survey respondents expected that they would make some use of each of the services tested in the survey, with usage expected to vary from less than once a month to at least once a day. Respondents said that faster text relay would be used most frequently; with one in five people (21%) saying they would use it at least once a day. Captioned telephony was expected to be the second most frequently used service. Video relay was expected to be the least frequently accessed service overall with 15 per cent of respondents expecting to use it at least once a day. Amongst BSL users who are most likely to benefit from this service this figure rises to almost four in ten and a further quarter would use the service at least once a week.

![Figure 7.1 Projected frequency of use of communications services](image)

Q38-1. If you were given access to these services, with unlimited calls and provided with the equipment for free, how much do you think you would use these services? (Base: all answered, 323, BSL users 53)
Those who were severely or profoundly deaf were more likely to say they would rate as valuable (score of 7-10) the special communications services in Figure 7.2, compared to those who were moderately or partially deaf or not deaf. For captioned telephony, for example, 53 per cent of those who were severely deaf and 64 per cent of those who were profoundly deaf rated the service highly (a score of 7-10). For faster text relay, 47 per cent of those who were severely deaf and 67 per cent of those who were profoundly deaf valued the service highly. For text relay, 53 per cent of those who were severely deaf and 56 per cent of those who were profoundly deaf valued the service highly. For video relay, 64% of BSL users, 47 per cent of those who are severely deaf and 47 percent of those who are profoundly deaf valued the service highly.
7.3. Additional data on valuation of services

7.3.1. Text relay

Table 7.5
Respondents who chose to take the calls instead of the cash were asked how high the cash payment would need to be before they would change their mind and go without the service to take the cash.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£15 (low price)</td>
<td>47</td>
<td>£132</td>
</tr>
<tr>
<td>£30 (medium price)</td>
<td>37</td>
<td>£59(^\text{18})</td>
</tr>
<tr>
<td>£60 (high price)</td>
<td>37</td>
<td>£271</td>
</tr>
</tbody>
</table>

Table 7.6
Respondents who chose to take the cash instead of the calls were asked how low the cash payment would need to fall to before they would change their mind and take the service

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£15 (low price)</td>
<td>49</td>
<td>£7</td>
</tr>
<tr>
<td>£30 (medium price)</td>
<td>65</td>
<td>£13</td>
</tr>
<tr>
<td>£60 (high price)</td>
<td>58</td>
<td>£24</td>
</tr>
</tbody>
</table>

\(^{18}\) One of the participants expressed a value of £100,000 per month. This entry has been removed as it was an outlying data point.
Table 7.7
Respondents were asked to consider how they would use a cash payment that was offered to them to make text relay calls. They were presented with the choices shown in the table below.

<table>
<thead>
<tr>
<th>% of Respondent who were offered £15 (low) Sample size = 106</th>
<th>% of Respondent who were offered £30 (medium) Sample size = 109</th>
<th>% of Respondent who were offered £60 (high) Sample size = 104</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
</tr>
<tr>
<td>14%</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>I would make 10 calls and keep £5</td>
<td>I would make 10 calls and keep £10</td>
<td>I would make 10 calls and keep £20</td>
</tr>
<tr>
<td>13%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>I would make 5 calls and keep £10</td>
<td>I would make 5 calls and keep £20</td>
<td>I would make 5 calls and keep £40</td>
</tr>
<tr>
<td>10%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>I would make no calls and keep the £15</td>
<td>I would make no calls and keep the £30</td>
<td>I would make no calls and keep the £60</td>
</tr>
<tr>
<td>15%</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>I would make longer calls up to my £15 limit</td>
<td>I would make longer calls up to my £30 limit</td>
<td>I would make longer calls up to my £60 limit</td>
</tr>
<tr>
<td>8%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
</tr>
<tr>
<td>13%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>Don’t know</td>
<td>Don’t know</td>
</tr>
<tr>
<td>25%</td>
<td>22%</td>
<td>17%</td>
</tr>
</tbody>
</table>
7.3.2. Faster text relay

Table 7.8
Respondents who chose to take the calls instead of the cash were asked how high the cash payment would need to be before they would change their mind and go without the service to take the cash.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£20 (low price)</td>
<td>38</td>
<td>£159</td>
</tr>
<tr>
<td>£40 (medium price)</td>
<td>32</td>
<td>£101(^\text{19})</td>
</tr>
<tr>
<td>£80 (high price)</td>
<td>35</td>
<td>£154</td>
</tr>
</tbody>
</table>

Table 7.9
Respondents who chose to take the cash instead of the calls were asked how low the cash payment would need to fall to before they would change their mind and take the service.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£20 (low price)</td>
<td>57</td>
<td>£9</td>
</tr>
<tr>
<td>£40 (medium price)</td>
<td>69</td>
<td>£17</td>
</tr>
<tr>
<td>£80 (high price)</td>
<td>59</td>
<td>£28</td>
</tr>
</tbody>
</table>

\(^{19}\) One of the participants expressed a value of £100,000 per month. This entry has been removed as it was an outlying data point.
Table 7.10
Respondents were asked to consider how they would use a cash payment that was offered to them to make faster text relay calls. They were presented with the choices shown in the table below.

<table>
<thead>
<tr>
<th>% of Respondent who were offered £20 (low) Sample size = 105</th>
<th>% of Respondent who were offered £40 (medium) Sample size = 109</th>
<th>% of Respondent who were offered £80 (high) Sample size = 102</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
</tr>
<tr>
<td>12%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>I would make 10 calls and keep £7</td>
<td>I would make 10 calls and keep £13</td>
<td>I would make 10 calls and keep £27</td>
</tr>
<tr>
<td>10%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>I would make 5 calls and keep £14</td>
<td>I would make 5 calls and keep £26</td>
<td>I would make 5 calls and keep £54</td>
</tr>
<tr>
<td>10%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>I would make no calls and keep the £20</td>
<td>I would make no calls and keep the £40</td>
<td>I would make no calls and keep the £80</td>
</tr>
<tr>
<td>21%</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>I would make longer calls up to my £20 limit</td>
<td>I would make longer calls up to my £40 limit</td>
<td>I would make longer calls up to my £80 limit</td>
</tr>
<tr>
<td>7%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
</tr>
<tr>
<td>14%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>Don’t know</td>
<td>Don’t know</td>
</tr>
<tr>
<td>25%</td>
<td>18%</td>
<td>17%</td>
</tr>
</tbody>
</table>
7.3.3. *Captioned telephony*

**Table 7.11**
Respondents who chose to take the calls instead of the cash were asked how high the cash
payment would need to be before they would change their mind and go without the service to
take the cash.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£25 (low price)</td>
<td>40</td>
<td>£514</td>
</tr>
<tr>
<td>£50 (medium price)</td>
<td>36</td>
<td>£212</td>
</tr>
<tr>
<td>£100 (high price)</td>
<td>39</td>
<td>£276</td>
</tr>
</tbody>
</table>

**Table 7.12**
Respondents who chose to take the cash instead of the calls were asked how low the cash
payment would need to fall to before they would change their mind and take the service

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£25 (low price)</td>
<td>55</td>
<td>£11</td>
</tr>
<tr>
<td>£50 (medium price)</td>
<td>64</td>
<td>£18</td>
</tr>
<tr>
<td>£100 (high price)</td>
<td>53</td>
<td>£37</td>
</tr>
</tbody>
</table>
Table 7.13
Respondents were asked to consider how they would use a cash payment that was offered to them to make captioned telephony calls. They were presented with the choices shown in the table below.

<table>
<thead>
<tr>
<th>% of Respondent who were offered £25 (low) Sample size = 106</th>
<th>% of Respondent who were offered £50 (medium) Sample size = 107</th>
<th>% of Respondent who were offered £100 (high) Sample size = 104</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
</tr>
<tr>
<td>16%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>I would make 10 calls and keep £8</td>
<td>I would make 10 calls and keep £17</td>
<td>I would make 10 calls and keep £33</td>
</tr>
<tr>
<td>8%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>I would make 5 calls and keep £16</td>
<td>I would make 5 calls and keep £34</td>
<td>I would make 5 calls and keep £66</td>
</tr>
<tr>
<td>8%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>I would make no calls and keep the £25</td>
<td>I would make no calls and keep the £50</td>
<td>I would make no calls and keep the £100</td>
</tr>
<tr>
<td>25%</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>I would make longer calls up to my £25 limit</td>
<td>I would make longer calls up to my £50 limit</td>
<td>I would make longer calls up to my £100 limit</td>
</tr>
<tr>
<td>7%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
</tr>
<tr>
<td>10%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>Don’t know</td>
<td>Don’t know</td>
</tr>
<tr>
<td>26%</td>
<td>23%</td>
<td>22%</td>
</tr>
</tbody>
</table>
7.3.4. Video relay

Table 7.14
Respondents who chose to take the calls instead of the cash were asked how high the cash payment would need to be before they would change their mind and go without the service to take the cash.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£30 (low price)</td>
<td>10</td>
<td>£364</td>
</tr>
<tr>
<td>£60 (medium price)</td>
<td>11</td>
<td>£111</td>
</tr>
<tr>
<td>£120 (high price)</td>
<td>9</td>
<td>£156</td>
</tr>
</tbody>
</table>

Table 7.15
Respondents who chose to take the cash instead of the calls were asked how low the cash payment would need to fall to before they would change their mind and take the service.

<table>
<thead>
<tr>
<th>Cash payment initially offered</th>
<th>Sample size</th>
<th>Average amount stated (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£30 (low price)</td>
<td>14</td>
<td>£10</td>
</tr>
<tr>
<td>£60 (medium price)</td>
<td>6</td>
<td>£33</td>
</tr>
<tr>
<td>£120 (high price)</td>
<td>8</td>
<td>£226</td>
</tr>
</tbody>
</table>
Table 7.16
Respondents were asked to consider how they would use a cash payment that was offered to them to make video relay calls. They were presented with the choices shown in the table below.

<table>
<thead>
<tr>
<th>% of Respondent who were offered £30 (low) Sample size = 28</th>
<th>% of Respondent who were offered £60 (medium) Sample size = 19</th>
<th>% of Respondent who were offered £120 (high) Sample size = 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
<td>I would make 15 calls each month</td>
</tr>
<tr>
<td>21%</td>
<td>21%</td>
<td>29%</td>
</tr>
<tr>
<td>I would make 10 calls and keep £10</td>
<td>I would make 10 calls and keep £20</td>
<td>I would make 10 calls and keep £40</td>
</tr>
<tr>
<td>11%</td>
<td>16%</td>
<td>0%</td>
</tr>
<tr>
<td>I would make 5 calls and keep £20</td>
<td>I would make 5 calls and keep £40</td>
<td>I would make 5 calls and keep £80</td>
</tr>
<tr>
<td>7%</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>I would make no calls and keep the £30</td>
<td>I would make no calls and keep the £60</td>
<td>I would make no calls and keep the £120</td>
</tr>
<tr>
<td>18%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>I would make longer calls up to my £30 limit</td>
<td>I would make longer calls up to my £60 limit</td>
<td>I would make longer calls up to my £120 limit</td>
</tr>
<tr>
<td>7%</td>
<td>5%</td>
<td>24%</td>
</tr>
<tr>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
<td>I would use all the money and add some of my own to make more or longer calls</td>
</tr>
<tr>
<td>11%</td>
<td>16%</td>
<td>6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>Don’t know</td>
<td>Don’t know</td>
</tr>
<tr>
<td>25%</td>
<td>21%</td>
<td>12%</td>
</tr>
</tbody>
</table>