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# Guide to Accessible Information

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Advice on making information accessible for people who are blind/partially sighted or deaf\*.

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The Self-Directed Support Joint Sensory Project:  
Deaf Action in partnership with Fife Society for the Blind.

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Clear Print Electronic



\* - the use of the term “deaf” includes people who are deaf British Sign Language users; deafened; have acquired deafness; or deafblind.

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# Contents

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| <b>Chapter</b>                      | <b>Page</b> |
|-------------------------------------|-------------|
| Introduction                        | 2           |
| Braille                             | 4           |
| Large Print                         | 8           |
| Electronic Screen Readers           | 15          |
| Audio Description of Text Documents | 23          |
| British Sign Language               | 28          |
| Subtitles                           | 39          |
| Audio Induction Loop System         | 61          |
| Credits                             | 68          |

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# Introduction

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Information is empowering and helps people to make decisions and choices that leave them in control of their life; so accessible, clear and well-produced information is therefore essential to allow this to happen.

There are over **11 million people** (1 in 6 of the population) in the UK who are considered deaf\*, with approximately **50,000** of those using British Sign Language (BSL) as their first or preferred language.

Over **2 million people** in the UK are blind/partially sighted. That's around one person in 30. Of these, around **360,000 people** are registered with their local authority. It is predicted that by 2020 the number of people with sight loss will rise to over **2.25 million**.

The Guide to Accessible Information gives sensible solutions to make information and services more accessible and break down some of the barriers of communication that exist in society for people who are deaf\* or blind/partially sighted.

The Equality Act (2010) places a duty on service providers to make reasonable adjustments to ensure that the service is accessible and

equitable for all. One such adjustment is the provision of information in an accessible format in circumstances where provision, criterion or practice puts a disabled person at a substantial disadvantage. The Guide to Accessible Information has been written with this in mind, and describes how each format is produced or piece of assistive technology is used; and the impact of not having information in an accessible form.

The Guide to Accessible Information is free to access, and is something we would encourage you to share in order to benefit people who are deaf\* or blind/partially sighted across Scotland and the rest of the UK.

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# Braille

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Braille is a system of touch reading and writing in which raised dots represent the letters of the alphabet and numbers, as well as music notes and symbols.

Transcribing is the process of converting a printed text to Braille. Transcribing is sometimes called translating but this latter term may have the misleading connotation that Braille is a different language rather than merely a different system.

The single most important issue that anyone interested in Braille transcribing must appreciate is that Braille transcriptions must be essentially error-free. The standards are much higher than for print. This level of accuracy is necessary because Braille uses the same cells for different purposes in different contexts. As a consequence, even slight errors can cause extreme difficulties in interpretation.

Most Braille is now transcribed to an electronic file in which the Braille cells are coded numerically, generally using Braille ASCII. Such transcription may be carried out either directly by a

Brailist/Transcription Worker or by means of a computer application such as Duxbury Braille Translator (DBT), MegaDots, or Braille 2000.

## **The Braille Transcription Worker**

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[Click here](#) to be re-directed to the clip for The Braille Transcription Worker – an interview with David Ross from Fife Society for the Blind (FSB). The clip has subtitles and audio-description of titles and questions.

## **Preparing your document for transcription**

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Here are some basic tips to help you to prepare your documents for transcription:

- Your document should preferably be provided in Word or plain text format. PDF files can be converted into Word/plain text documents for transcription.
- Photos or images need to be to be labelled, or a description attached to explain the content and significance of the image.
- If tables are included the information in them will need to be extracted by the Transcription Worker prior to transcription into Braille.
- Avoid the use of text boxes as screen-reading software will not pick up the text. This is an issue in cases where the Transcription

Worker is blind/partially sighted and uses screen-reading software to complete their work, including transcription. If a text box is included, then as with images/diagrams there needs to be an accompanying label or explanation.

- Any text formatting will be handled by the Braille software, so the inclusion of bullet points, underline, numbering, bold, or italics will not affect the transcription into Braille.

## **Electronic Braille**

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Electronic Braille is created using an Electronic Braille Display, which is a device that has a row of special "soft" cells made of plastic or metal pins. The pins are controlled by a computer and move up or down to display, in Braille, the characters that appear on the computer screen. This type of Braille is said to be "refreshable," because it changes as the user moves around on the screen. The Braille display usually sits under the computer keyboard.

The displays have additional controls which can be used to move around the screen, reading whichever part you wish, and this reduces the need to keep switching back and forth between the display (for reading) and the keyboard (for everything else).

Braille can provide layout information more efficiently and using a Braille display is described by users as being more accurate. A spelling mistake, for example, is often more obvious on a Braille display than hearing mispronunciation amongst a lot of speech. It is sometimes said that speech is for speed and Braille is for accuracy. For many people Braille is their natural way of working, and is an essential medium for deafblind people.

Electronic Braille note-takers are portable devices with Braille keyboards that Braille readers can use to enter information. The text stored in these devices can be read with a built-in Braille display or the device can read aloud with a synthesized voice. These devices are handy for taking notes in different social and work situations, and often come with built-in address books, calculators, and calendars.

## **Case Study Example – Stuart**

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[Click here](#) to be re-directed to an interview with Stuart Beveridge (FSB) relating to his use of Electronic Braille. The clip has subtitles and audio-description of titles and questions.

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# Large Print

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Large print is commonly used for people with low vision to allow them to read more easily, and without the need for magnification. We have outlined some basic rules to follow in order to create documents in large print and to improve access to your information for people with low vision.

## **Type**

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The size of the type (known as point size) is a fundamental factor in legibility. We recommend a type size 16 point. The larger the minimum type size, the more people you will reach.

## **Contrast**

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The better the contrast between the background and the text, the more legible the text will be. Note that the contrast will be affected by the size and weight of the type. Black text on a white background provides best contrast, but other dark colours can be used with white text as long as the contrast is sufficient.

## Font

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Avoid highly stylised fonts, such as those with ornamental, decorative or handwriting styles such as Times New Roman; Century; Georgia; or Rockwell.

Choose fonts with minimal styling, which are sometimes classed as “Sans Serif” fonts such as Arial; Calibri; *Comic Sans MS*; or Tahoma.

## Type styles

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Blocks of CAPITAL LETTERS, underlined or *italicised* text are all harder to read. A word or two in capitals is fine but avoid the use of capitals for continuous text.

Underlining text or setting it in italics should always be avoided and an alternative method of emphasis used, such as **bold text**.

## Leading

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The space between one line of type and the next (known as leading) is important. As a general rule, the space should be 1.5 to 2 times the space between words on a line.

## **Type weight**

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This refers to the appearance of the letters and how thick/bold they appear. People with sight problems often prefer bold or semi-bold weights to normal ones. Avoid light type weights where the text may appear more faint, or fine.

## **Numbers**

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If you print documents with numbers in them, choose a typeface in which the numbers are clear. Readers with sight problems can easily misread 3, 5, 8 and 0.

## **Word spacing and alignment**

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Keep to the same amount of space between each word. Do not condense or stretch lines of type.

We recommend aligning text to the left margin as it is easy to find the start of the next line and keeps the spaces even between words. We advise that you avoid justified text as the uneven word spacing can make reading more difficult.

## **Columns**

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Make sure the margin between columns clearly separates them. If space is limited, use a vertical rule.

## **Setting text**

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Avoid fitting text around images if this means that lines of text start in a different place, and are therefore difficult to find. Set text horizontally as text set vertically is extremely difficult for a partially sighted reader to follow. Avoid setting text over images or textures as this will affect the contrast.

## **Forms**

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Partially sighted people tend to have handwriting that is larger than average, so allow extra space on forms. This will also benefit people with conditions that affect the use of their hands, such as arthritis.

## **Navigational aids**

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It is helpful if recurring features, such as headings and page numbers, are always in the same place.

Leave a space between paragraphs as dividing the text up gives the eye a break and makes reading easier.

A contents list and rules to separate different sections are also useful.

## **Printing**

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Avoid glossy paper because glare makes it difficult to read. Choose uncoated paper that weighs over 90gsm. As a general rule, if the text is showing through from the reverse side, then the paper is too thin.

## **Case Study Example – Carole**

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[Click here](#) for an interview with Peer Volunteer Carole Tildesley about her use of Large Print documents. The transcript of the interview is provided below:

Hi I'm Carole. I request information in large print because it is easier for me to read. For example, it helps with bank statements; to access appointments; and it also gives me a bit more independence. It allows me to do more for myself, and not rely quite so much on other people.

I recently received a handwritten appointment and I had to get someone else to read it, which meant a loss of independence and a loss of privacy. Also, not being able to find the phone numbers to phone up and say "could you send this in an alternative format". So there is all that you have to bear in mind. So every time you get an inappropriate format sent you have to then find the relevant number, chase them up and sometimes more than once. So you end up missing appointments, in my case. You get questioned about why you

didn't turn up. It's pretty much a weekly thing. You get two or three appointments and very rarely are they sent in the relevant format. So it's pretty demoralising at times.

They "don't have the facility" is what you are often told. Or sometimes "well, we don't know how to do that". So then you are left feeling a bit lost and thinking "well what do I do?" Because you are telling me "you don't turn up to appointments" or "you haven't paid this bill", but you can't provide the facility to help eliminate this issue. So you are left going round in circles, continually.

Question 1: Can you give me an example of how large print has been provided to you in the past?

Well one time it was done, but not very successfully was at college. I repeatedly got things on A3 paper. You get a lot of grey on black, because they have tried to photocopy it but of course instead of the paper being white if there are any marks on the paper that they have not noticed, that gets picked up. So it adds to the confusion on the paper. If you are photocopying more than one page, you are then trying to navigate an A3 page on a single corner of a table and if you've got more than one page to a document well that's pretty impossible. It makes learning very difficult.

Me personally, the Tahoma font works better because the lines are bolder; the letters look like the relevant letters, like 6's, 9's, 5's. They all look as they are supposed to, they don't look distorted and there are no extra fancy bits like with the calligraphy fonts.

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# Electronic Screen Reader

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Screen readers are a form of Assistive Technology (AT) used by people who are blind/partially sighted to read the text on a computer screen or mobile device. They run in the background and work with Windows, MS Office programs, Internet Explorer and any other program which has standard Windows toolbars, menus and text windows.

Apple products such as iPads, iPhones and Apple Mac Computers have a built-in screen reader called VoiceOver. This works in a similar way to other screen readers by telling the user what is on the screen, and walking them through actions like selecting a menu option, application, or activating a button using the keyboard, trackpad or manual gestures on a touch screen.

Screen readers allow users to choose whether to read all of the text in a window; read a line or word at a time; or just one letter at a time. This is helpful as people may need to read the same sentence several times or to check the spelling of names or new terms.

The information can be presented to the user in different ways such as text-to-speech, sound icons, or through an Electronic/Refreshable Braille device. There can be some variation between different screen readers, but most can be customised to suit the personal preferences of the user.

The user can control the “speech verbosity” - how much speech feedback they wish to hear. Based on verbosity settings, a screen-reading program informs users of certain formatting changes, such as when a frame or table begins and ends; where graphics have been inserted into the text; or when a list appears in the document.

Some screen readers can read text in more than one language, provided that the language of the material is encoded in its metadata. Some screen reading programs also include language verbosity, which automatically detects verbosity settings related to speech output language. For example, if a user navigated to a website based in the United States of America, the text would be read with an American accent.

## How do you make your document more accessible for screen readers?

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### Don't use direct formatting – use Styles

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The use of Styles to distinguish between titles, headings, sub-headings, subtitles, subsections, bullet lists and other parts of the document is extremely helpful for people using a screen reader. The user can adjust the settings so that all changes in styles are announced. This gives them a richer view of the document which in turn helps them to understand the content better.

Direct formatting can be used to achieve the same result, for example you could just select a line of text and make it bold, 14 point and Arial font. This would make it look like a heading, but it wouldn't be recognised by the screen reader as a change in style, and as a result it will not be announced or be able to be used as a point of navigation.

## Headings

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- Use “Title” style for the document title.
- Use “Headings” for major sections such as chapters, starting with Heading 1 for most important and progressing to Heading 2, Heading 3 and so on.
- You can change the look of any style so that all headings use the same font/colour/appearance.

## Tables

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Use tables for the correct purpose, arranging tabular information. Don't use them for laying out columns or to lay out a list, use the column and list tools.

Turn on the option “Heading rows repeat” for any table which has headings. This will help screen reader users if it is a long table, and anyone who needs to increase the font size which might cause the table to split over two pages.

If a table has column headings, use a style for this row which includes bold text as this helps the screen reader to identify them.

## Tables with text

Screen reader programs can step through tables cell by cell, across and down rows.

Table 1 – Nursery Rhymes, contains two nursery rhymes that have been written line-by-line into 2 columns.

Table 1 – Nursery Rhymes.

| <b>Rhyme 1</b>                | <b>Rhyme 2</b>                        |
|-------------------------------|---------------------------------------|
| Jack and Jill                 | Old King Cole                         |
| Went up the hill              | Was a merry old soul                  |
| To fetch a pail of water.     | And a merry old soul was he.          |
| Jack fell down                | He called for his pipe                |
| And broke his crown           | And he called for his bowl            |
| And Jill came tumbling after. | And he called for his fiddlers three. |

The author might expect the full column for Rhyme 1 and then Rhyme 2 to be read in turn, but the screen reader software will read the text across the page, cell by cell. This will lead to the incorrect order e.g. Rhyme 1, Rhyme 2, Jack and Jill, Old King Cole, Went up the hill, Was a merry old soul. So be aware that any information put into tables or columns will be read in this way, and this also applies to tables/columns created using tabs.

## Figures

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There are a number of different types of figures that may appear in a document, including images, diagrams, text boxes, flow charts, and other items that are placed for their visual significance. If no labels/description has been added to figures within a document then the information within these figures will not be read by the screen reader, but the user will be aware that there is an item within the text. The screen reader may call the item “image”, “text box”, “edit box”, or may try to pick out familiar letters/numbers within the image but will not necessarily present them to the user in a logical order. Sometimes the screen reader will play a sound when it reaches a figure in the text to indicate to the user that there is an item.

If the document you are working on will be converted into PDF then you are able to add short descriptive text to an image by right-clicking on the image and choosing “Format picture” then select “Alternative Text”. Enter a few words in the “Alternative text” box and when the document is converted into PDF form the screen reader will read the alternative text when the user reaches the image in the document. The alternative text will not be read by the screen reader if it is a regular Word document.



Figure 1

If the description is long then it should be included within the main body of text rather than the alternative text function, for example:

“Figure 1: The image is of a head and shoulders aligned in the centre at the base of the image, with cables connecting the head to 5 different electronic devices – a laptop; an electronic tablet; a computer; a mobile flip phone; and a smart phone. Other smaller images fill the space between the devices and the head/shoulders and represent the information shared between the user and the devices - music; email; calls; social media.”

## **Case Study Example – Walter**

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[Click here](#) to be re-directed to an interview with Peer Volunteer Walter Ramage relating to his use of Electronic Screen Readers. The clip has subtitles and audio-description of titles and questions.

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# Audio Description of Text Documents

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Audio Descriptions differ from Screen Readers/Voiceover because they refer to a recording of a real person reading from a document, and describing images, tables, figures and other content contained in that document rather than the use of text-to-speech software. It is also used in film/visual production to allow people who are blind/partially sighted to know what is happening at times where there is no sound/speech, and to describe in greater detail the visual content.

This format is important as it allows people who are blind/partially sighted and who do not have the benefit of assistive technology such as Screen Readers/VoiceOver or Refreshable Braille devices to access information in spoken word form.

## **What is an Audio Description?**

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An audio-description uses a human voice rather than a computer-generated voice via text-to-speech software. The term can be applied to someone producing an audio version of a document or piece of information, but is also applied to televisual programmes where narrators provide additional information about what is happening on screen for the benefit of people who are blind/partially sighted.

Whether you are creating text documents, or generating a range of multimedia pieces in film, text and audio you will need to consider some rules about audio-description and how/when to use it.

It is important to offer audio-described information as not everyone who needs information in audio will have access to screen-readers or other equipment that would provide a voice-over. Screen-readers and the equipment needed for them can sometimes be very costly, and even in cases where the software is free the devices needed to use the software may not be; so offering an audio-described version allows much wider access to information.

## **Creating Audio Descriptions**

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The process of creating an audio description of a document is quite straight forward, and there are organisations across Scotland providing transcription services using approved and experienced Voiceover Artists. However, we have broken down the process into sections to allow you to create your own recordings.

## Why make your own recordings?

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There are a number of potential benefits to making your own recordings, such as:

- Cost – no need to contract outside companies.
- Timescale – no need to wait a number of weeks for the recording to be complete and returned to you/sent out to the intended recipient.
- Familiarity – if the person who composed the letter/document is recorded reading it then the intended recipient will be given information read in a familiar voice. In cases where they have not yet met the person sending the letter it could provide them with an opportunity to hear the voice prior to meeting.
- Understanding – your team/organisation will understand the information you provide better than outside organisations, and this will come across in the audio description.

## Preparation

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There are a few things that you will need to consider when preparing to make a successful audio-description.

- Find a place that is quiet, with as little background noise as possible.

- Test the recording equipment before making your final recordings to ensure that the quality of sound is good, and that your voice is being captured clearly.
- In instances where you are recording multiple voices at once, make sure that the microphone is placed in a way that captures all participants as clearly as possible, or record each voice separately and edit afterwards.
- Consider the meaning of the words and the subject that you are reading, rather than seeing it as a series of words and sentences. This will result in a natural pattern of reading and not a fixed rhythm.
- Highlight words to be stressed within the document, and make side notes to indicate how they are to be emphasised. Names, places and dates should often be highlighted like this in some way; be particularly careful to say these clearly.
- Practice reading aloud; silent reading will not give you a sense of how things will sound to the listener.
- There is no need to repeat information; the listener can if necessary replay the recording. However, spelling of important names and terms is usually appreciated, if appropriate in your setting.
- If you have a series of documents to record then try to vary the readers so that the listener is not listening to the same voice for

all documents. Some listeners may also experience hearing loss and attend better to voices with high/low tones, so varied voices may be of benefit.

- Divide lengthy documents into sensible sections or "tracks", and include a recorded "contents" list of the tracks on the final recording.

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# British Sign Language (BSL)

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British Sign Language (BSL) is a visual-gestural language, with its own grammar and principles, and is completely different from the grammatical structure of English. The language makes use of space and involves movement of the hands, body, face and head.

People who use BSL as their first language may simply identify themselves as British Sign Language (BSL) users or speakers, as opposed to using the term Deaf (with a capitalised D). Such individuals often do not feel they are disabled, but experience barriers on an everyday basis due to a lack of understanding and lack of services delivered in their first language. They also identify themselves as part of a linguistic and cultural minority, and take great pride in being part of the Deaf community, a community with a rich heritage and identity.

With more than 60,000 people using BSL as their first or preferred language and around 125,000 people in total able to converse in BSL in 21st century UK, BSL was finally recognised as a language by the Department of Works and Pensions on 18 March 2003.

In recent years there has been a lot of significant movement in Scotland to have this recognition enshrined in legislation, and The British Sign Language (Scotland) Act 2015 was passed into law on 17 September and is the first of its kind in the United Kingdom. The Act became enforceable the day after it received Royal Assent on 22 October 2015.

The legislation aims to raise awareness of BSL and improve access to services for those using the language by requiring the Scottish Government and listed local bodies to publish and implement their own plans for how they will promote the use of the language. It can therefore be considered as an enabling framework to public authorities for the promotion of BSL within their services.

## **Barriers to Access**

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Often Deaf people find it difficult to access services as the providers are not aware of how best to communicate with them, or do not understand that aids to communication should be arranged and how this can be done. We will address these aids to communication later in this section.

There are also some assumptions and misconceptions about Deaf people. For example, writing things down is not always effective as

English is often not a Deaf person's first language and they may struggle to understand.

Lip-reading is not always effective, nor is it a skill that many Deaf people have. Even if somebody is able to lip-read well, many words have similar lip patterns and misunderstandings often occur.

If Deaf people think a service is inaccessible then it is unlikely that they will contact the service. This lack of demand may lead providers to mistakenly think there is no issue with the service they offer.

As many Deaf people are not comfortable with written English, they may not understand letters from agencies and therefore fail to take any necessary action. Even if they are able to understand letters they may struggle to respond as many agencies rely on telephone contact, which is inaccessible for deaf people. Often, this means that situations may deteriorate significantly before any remedial action can be taken and deaf clients may present with complex issues, sometimes with very short deadlines. The client may also feel more stressed and anxious than if the situation had been dealt with earlier on.

## **Methods of Contact/Correspondence**

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For BSL users the “gold standard” method of correspondence would be for written documents to be translated into BSL, so that they are receiving information in their first language. There are a number of agencies who are able to do this in Scotland, so we would advise you to contact your local Deaf Organisation/Charity for further information and the process of BSL Translation is explained later in this section.

Most forms of correspondence focus on written English (email; text message; letter), which may in itself be a barrier for somebody whose first language is BSL and create further confusion and misunderstandings. When using written English, try to be as plain, simple and straightforward as possible. Bullet points and short summaries can be effective as long as the summaries do not remove key information or exclude anyone as a result.

The Next Generation Text Relay service ([www.ngts.org.uk](http://www.ngts.org.uk)) is a service that connects a hearing person using a normal telephone with a deaf person using a textphone (a special telephone with a keyboard and display). An operator acts as an intermediary and will type what is spoken, and speak what is typed. As with other written correspondence, this form of communication is dependent on written English and may not be suitable for all deaf people.

The use of BSL interpreting (both in-person and remote/online) may be an alternative in some instances, and is addressed later on in this section.

## **British Sign Language Translation**

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### What do you need to provide for translation into BSL?

In order for your information to be translated from English into British Sign Language in the most accurate way you will need to provide the presenter and/or the organisation providing the translation with as much supporting information as possible. This could include:

- Complete text documents/booklets
- Supporting documents linked to those you would like translated
- A full transcript of audio content from visual media
  - Visual media with subtitles if available

This additional information will help provide context for your information, and will allow the presenter to use the most appropriate signs and expression. If you have visual media with subtitles and would like the BSL translation to be added to this visual media, then it is usually possible for the BSL presenter to sign with similar timing to

the subtitles. This will mean that anyone following the BSL translation will also be able to refer to the subtitles for support if necessary as they will be in time.

## **The Role of a British Sign Language Interpreter**

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[Click here](#) to be re-directed to an interview with British Sign Language Interpreter Paul Belmonte.

## **How to book a BSL Interpreter**

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We have included two links to assist with booking an interpreter:

<http://www.sasli.co.uk/register/find-an-interpreter/> - This is a link to the Scottish Association of Sign Language Interpreters (SASLI) and their list of registered British Sign Language Interpreters. It includes details of the kind of work each interpreter is able to do, and ways to contact them.

<http://deafsectorpartnership.net/deaf-services-map/> - This is a link to a map of all of the services for D/deaf people across Scotland, allowing you to select your local authority area on the map, or by scrolling down under the map to a full list of services in different categories for each

area. This includes organisations that provide interpreting services, and links for how to contact and book interpreters.

Ensure any organisation you contact provides interpreters who are on the National Register of Communication Professionals working with Deaf and Deafblind People (NRCPD), and check for their NRCPD badge upon arrival.



Figure 2: Image showing a blank example of an NRCPD registered Sign Language Interpreter badge for reference when booking an interpreter.



Figure 3: Image shows a badge for the Scottish Association of Sign Language Interpreters for reference when booking a SASLI registered interpreter.

If possible, try and book an interpreter up to 3 weeks before the service is needed. In emergency situations, organisations will try their best to provide an interpreter faster. If you cannot get a face to face interpreter quickly enough then there are Online/Remote Interpreting Services available in Scotland.

### **Online/Remote BSL Interpreting Services**

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Online/Remote BSL interpreting services allow users to access BSL interpreting services on demand via a device with a webcam/camera; microphone and speakers and an internet or telephone signal.

The benefit of this form of interpreting is that there is no minimum 2 or 3 hour booking for the interpreter and you only pay for the time you have used. Interpreters are based at a desk with a telephone and webcam so there is no issue with travelling to a variety of locations, and they are usually available on demand or with minimal waiting times so there is usually no need to book well in advance.

For services/organisations offering on-demand or “drop-in” help this form of interpreting service would be of great benefit as BSL users could receive help in the same way as hearing people. The service would also benefit from not having to pre-book an interpreter for a set time at a minimum of 2-3 hours, saving on cost but also being prepared in the event of needing BSL interpreting/support.

Most remote interpreting services offer two options to their users: Video Relay Interpreting (VRS) or Video Remote Interpreting (VRI). The following sections describe how they work.

### Video Relay Interpreting (VRS)



Figure 4: Image shows three users. On the left of the image is a Deaf User; In the middle is an online interpreter shown on a computer monitor; on the right is a Hearing User holding a telephone. Arrows connect the three users to indicate the flow of information that is described in the paragraph immediately following the image.

Video Relay Interpreting is where the interpreter will make a phone call on behalf of a BSL user via a webcam on their computer/phone, interpreting to the called person and back to the user to enable them to deal with whatever the subject matter is. An example of this arrangement could be a BSL user wanting to speak to their bank about their account, or a BSL using student looking for information about their college course but being told that all contact must be made over the telephone.

## Video Remote Interpreting (VRI)



Figure 5: The image shows three people: a Deaf User; a Hearing User; and an interpreter on a computer screen. The Deaf and Hearing Users are sat together on the left hand side of the image in front of a laptop, and the interpreter on the screen is shown on the right of the image. Arrows connect the two sides of the image to show the flow of information as described by the text immediately following the image.

Video Remote Interpreting (VRI) is where the interpreter will communicate with you and somebody who is actually with you at the

time. An example of this would be a BSL user visiting the local council money advice service to speak to an adviser. They could sit with the adviser and access the interpreter on screen.

## Service Providers available in Scotland

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We have put together a short list of links for organisations providing online/remote interpreting services to people in Scotland:

- Sign Live - <http://signlive.co.uk/>
- Signvideo - <http://www.signvideo.co.uk/signvideo-for-home/>
- Contact Scotland BSL - <http://contactscotland-bsl.org/>
- Interpreter Now - <http://www.interpreternow.co.uk/>

Information about their services can be accessed through their websites, along with examples of where their services are currently used.

## Case Study – Alison

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[Click here](#) to access an interview with British Sign Language user and Peer Volunteer Alison Marshall about the importance of information being available in BSL. Subtitles and voice over are provided.

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# Subtitles

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Subtitles are the term used for the addition of on-screen text to visual media, allowing the audience to access information about speech, sound effects, music, or other audio that may feature. They can be used to present a written translation of a dialog in another language (such as British Sign Language) or a written rendering of the dialog in the same language.

For people who are deaf\*, subtitles are an essential part of visual media and provide access to the same information as people who are hearing. When considering subtitles for people who are deaf\*, it is important to include non-dialogue audio sound effects and speaker identification so that the viewer is completely aware of all audio content and can determine who is speaking, or where any audio sound effects originate from.

This section will address good practice when creating subtitles, and will give you some instructions on how to add your own subtitles via YouTube. If you are working with a professional multimedia service then it is unlikely that you will be adding the subtitles yourself, but it is essential that you request subtitles on your visual media in order to

provide access to people who are deaf\* (approximately 11 million or 1 in 6 people in the UK).

## **Where do I start?**

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For the purpose of this guide, we will look at subtitles as a means for providing access to information for people who are deaf\*; or as a means to translate information that was originally presented in British Sign Language.

## **Transcript**

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In order to create subtitles you will first need to create a full text transcript of the audio information that is being presented including speech, sound effects, music, or other audio that may feature. If the visual media is scripted then it will make the process of adding subtitles slightly easier as you will have the main body of your transcript, and will need to concentrate on noting the incidence of additional audio information. If you do not have a script then you will need to type out a word-for-word transcript of all dialogue and audio information so that it can be included as subtitles. This will also provide a full text transcript to add to your other accessible documents.

When typing your transcript you will need to identify who/what is producing the audio, so that this can be made clear in your subtitles. This could be done in script form:

{{Very loud music plays from a small terraced house}}

Dave: I really hope this is the right place?

Steve: Well this is the address that she gave us, so I'm sure it will be.

{{Doorbell rings}}

Dave: Not sure they will hear the bell over that music.

{{Doorbell rings again, followed by hard knocking on the door}}

{{Music stops}}

Owner: Can I help you?

As the conversation develops between the 3 people you would continue to identify who was speaking, and to add in any other sound effects, music or audio, and where it originates from.

Where possible, try to follow the language/dialect/words used as closely as possible so that the subtitles are an accurate representation of the audio information being presented.

## Colour Contrast

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In order to demonstrate good practice for colour contrast and placement, we have included an example image of Alison Marshall presenting some information in British Sign Language in front of a blue screen (Figure 6).



The colour contrast between Alison and her background was chosen as her signing is clearer for people who use British Sign Language. If the background matched Alison's clothing, or her skin tone then it is possible that some signs might be lost, and therefore the information would not be clear.

The same principle applies to the colour contrast and placement of the subtitles. We have chosen a solid black panel as a background for the

subtitle text, and have used white text so that there is a clear contrast between the background and the text. It is common to see text in yellow, green, or other light colours against a dark background/panel as it means that the text is not lost if the visual media is changing in the background.



Figure 7: The image shows a male BSL presenter with black shirt presenting alone in front of a background of different blue shades. There is text on the top right of the image and subtitles to show translation of information across the bottom of the image.

This example does not have a solid black panel behind the text, but the text is presented in white with clear shadowing of all letters in black to provide contrast and to make it clearer when the background colours are varied and the presenter is moving.

You must consider the colour contrast of the subtitles for the duration of your visual media to ensure that you can see the subtitles clearly when the background is changing. You could include a note in your transcript about changing backgrounds, to indicate if it is particularly light; dark; fast moving; or would provide a challenge for subtitle contrast.



Figure 8: The image shows two ladies, Alison and Sophia, on a tandem bicycle before they set off on a sponsored ride.

We have used black text for the caption and the contrast is poor, especially where the text is crossing over the wheels of the tandem

and Sophia's feet. As we have described above, the colour of text needs to be one that will contrast with multiple backgrounds and in this instance a different colour should have been chosen.

## Text Size and Font

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It is important to make sure that the text size and font chosen for the subtitles is suitable.

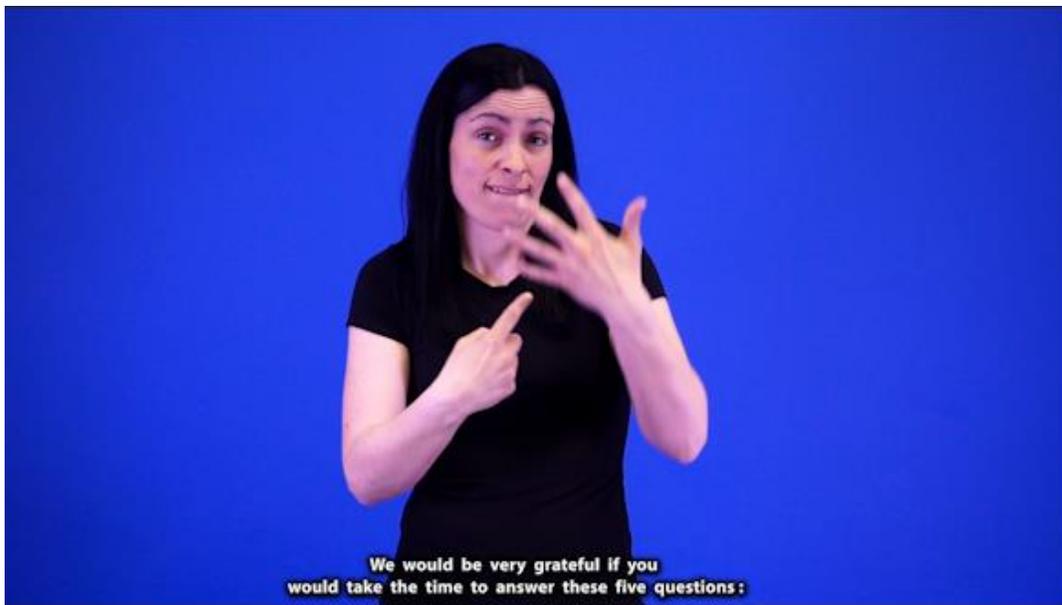


Figure 9: The image shows a female BSL presenter in a black t-shirt in front of a blue background. There are text subtitles on the bottom of the image.

This example shows subtitles with text that is too small, making it hard for people to read. The second example (Figure 10) uses a much more suitable text size and is easier to follow.



Figure 10: The image shows a female BSL presenter in a black t-shirt in front of a blue background, but differs from Figure 9 as the subtitle text at the bottom of the screen is much larger.

If you follow the guidelines on font choice that we have outlined in the Large Print section of this guide then you will be able to select a font that suits the vast majority of people who rely on subtitles for visual media.

### Number of Words in Subtitles

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It is important to remember that people will not just want to read the subtitles they will also be concentrating on your visual media.

Therefore, it is important not to overload the screen with text and

instead to maintain no more than 2 lines of subtitles on the screen at a time and to keep pace with all of the audio information that is being presented. There may however be times where the pace of the audio information is such that only 2 lines of text that is changing at a rapid pace will not allow people time to read the contents. In these instances it would be sensible to add another line of subtitles across the screen. The example below (Figure 11) is an extreme one, but shows the effect of having too much text on the screen, and how it not only dominates your attention but also covers some of the presenter. In British Sign Language translations it is important that any subtitles do not block/cover the presenter so that the information can be received by the viewer.



Figure 11: The image shows a female BSL presenter in a black t-shirt in front of a blue background, and has 4 lines of subtitle text at the

bottom of the image to demonstrate the point made immediately before the image.

## Placement

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The placement of subtitles is important, as if they are placed poorly then this will affect the viewing experience. The most common positioning for subtitles is at the bottom of the screen with central justification as this is least likely to block the visual content. However, it can depend on what is happening on the screen.

Consider the image in the previous section relating to the number of words in subtitles, where Sophia is presenting information in British Sign Language. If the subtitles are placed too high up the screen then they will cover some of her signing, and therefore impact on the visual experience. Other examples could be where the original film contains labels; text; graphics; video playback controls or other items at the bottom of the screen that would be covered or hidden by subtitles.

It is acceptable to place the subtitles at the top of the screen if this provides the best visual experience, and has the least impact on people being able to read the subtitles and see what is happening on the screen.

If there does not appear to be a good place to put the subtitles then other solutions can be found.



Figure 12: The image shows the head and shoulders of a man in a blue shirt. The image has a black frame on 3 of the 4 sides, with white subtitle text in the bottom portion of the screen. The black frame also contains an image of a female BSL presenter in a white top in the bottom right of the image.

In this example the size of the screen has been reduced, leaving a black frame in which to place subtitles alongside a British Sign Language presenter without impacting on the original visual content.

## More than one person

If you have visual media where there are two or more people on the screen together, then you will need to make it clear who is speaking. In the example we have used, Sophia and Leah are on screen together and are starting a conversation. Sophia is shown in yellow, and Leah is shown in pink. This will remain consistent throughout their conversation, and if another person enters the conversation then a different colour will be used for them.



Figure 13: Image shows two female BSL presenters sat on a wooden bench in winter clothes. They are facing each other, both holding two thumbs up. There is text at the bottom of the screen and says “Hi there” under the female presenter on the left of the image; and “How are you?” under the female presenter on the right of the image.

## **How do you add subtitles?**

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If you are working with a professional multimedia service then they will be aware of the process required to add subtitles, and you will need to request that they are added to your visual media to provide access in line with the Equalities Act (2010). If you are creating your own visual media and publishing it online via your website or social media then the following process will be useful. It makes use of the video editing features on YouTube, and although it may take time to get used to the process it will allow you to add subtitles without the need to pay external services.

We would recommend that you follow the steps we have described earlier and create a full text transcript of your video content before you apply the subtitles. We believe that this will make the process easier as you will be able to lift sections of the transcript text straight into the editing tool on YouTube.

These steps were kindly provided by Disabled Persons Housing Service in Fife, and the associated blog can be found here:

<http://www.sdsoptionsfife.org.uk/blog/6-easy-steps-to-sub-titling-your-video>

## Step 1

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You will need to sign up for a YouTube account, and will be adding subtitles to content that has been added by you and not content that you have added to your list of preferred videos or content created by other users.

If you already have an account then you will need to sign in and locate the “Video Manager” button, usually positioned above the channel art/banner and profile image, at the top of the central column of content on your screen.

## Step 2

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Your videos will be listed on the right hand side of the screen. Find the video you would like to add the subtitles to, and locate the “Edit” button. There is a drop-down arrow on the right of this button. Click the drop down arrow to reveal a list of options.

## Step 3

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From the list of options you are now presented with, select “Subtitles & CC” (where “CC” means Closed Captions).

## Step 4

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Following Step 3 will move you to a new screen, showing your video in a larger panel in the centre of your screen. There will be a series of menu buttons across the top of your screen, as well as text entry

boxes for web links. You will need to locate the “Add new subtitles or CC” button on the right of your screen, and type the chosen language into the text box e.g. English (United Kingdom).

### Step 5

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Once you have selected your language you will be given more options. You will need to select “Transcribe and auto-sync” from the available options.

### Step 6

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At this point you will be given the opportunity to type out the transcript in a text box while watching the content. The video will pause and resume depending on whether or not you are typing. If you have already typed out a full text transcript then you are able to copy and paste the full text into the text entry box rather than having to repeat the process again.

### Step 7

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Once you have finished typing or inserting the full text transcript you will then be able to review the subtitles. You can assess whether the timings fit with the audio-visual content, and adjust them accordingly by clicking “Set timings”.

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## Step 8

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Once you are happy with the timings and appearance of the subtitles, on the same screen you will need to locate the “Actions” button, which has a drop-down arrow. This will give you a further list, from which you will need to select “Publish”. This will add and save your subtitles.

## **Case Study – Marilyne (Hearing Aid User – Acquired Deaf)**

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[Click here](#) for an interview with Marilyne about her use of subtitles, presented in BSL with subtitles. The full transcript is included below:

Question 1: When do you use subtitles?

They have to be on all the time now. Sometimes they are too slow, so I try to watch what is happening and what is being said but then I quickly don't know what's going on. The news programs are so slow, so it can take a while to figure out what is happening and whether it is something important. The subtitles are not usually in sync with the speaker, and are usually a good few seconds behind so by the time I have followed the subtitles the picture has changed and doesn't match the subtitles, so it is very confusing and is hard to figure out what is going on. It gets even worse when there are more than one people in the conversation. It is really hard to follow!

Another issue with the TV is when they know that someone is giving a speech about something, could they not have a copy of the speech that they could use for the subtitles rather than captioning it and not getting it right, or not having it in time with the picture?

It makes me wonder why I pay for a service when it is not right, or I am unable to access most of the content provided on the television.

Question 2: So what impact does this have on your experience of visual media?

I only watch channels with subtitles, and those without them I don't watch. So rather than picking a program that I actually want to watch I have to find something with subtitles and watch it, which means I don't always get to watch the better shows or ones I think I would like.

I like older shows and documentaries but a lot of them don't have subtitles. I might have watched something when my hearing was better than it is now, and I didn't rely heavily, if at all on subtitles. But if I wanted to watch them now then some of the films have them (subtitles), some don't. It is the responsibility of the person making the film to make sure that they are good subtitles.

Question 3: Are there any shows that have good subtitles, and what makes them good?

Game of Thrones! It is through the Sky service, so I can watch it when I like rather than having to know when it is on but the addition of the good subtitles has made me want to watch it all as I can follow what is happening. I might have missed something on the screen but if I have the subtitles then I can still keep up with the story, so it is great.

Placement of subtitles on the screen is very important. Sometimes the subtitles are away up the screen, so you're not seeing the people/subject on the screen so you miss information. If everyone could just stick to the same format and place them somewhere near the bottom then that would be really helpful. Not blocking people or content on the screen.

Colour contrast can sometimes be tough. I have seen a few things where they use grey text, and I miss that there are subtitles (because the text does not stand out) and once I have realised they are there I might have missed the first bit of information and be lost about what they are talking about. Size needs to be sensible too. If it takes over the screen then, although it is good to know what is happening, it is too much of a distraction. Maybe they should be placed in a frame around

the outside? I have seen them where there is a black frame around the main screen, and the subtitles are at the bottom of the screen. It was great! I could see what was happening but also read the subtitles.

It would be good if everyone who produces visual media would include subtitles on their information, because sometimes I watch things and maybe don't catch a word as some words and letters can sound similar, or look similar on the lips when I am trying to lip-read. If I get it wrong then the context is all wrong, and I end up wondering what the word was rather than concentrating on what is being said afterwards. Or my response to what is being said is not appropriate, or in context. It does not matter how long/short the film is it needs to have subtitles so that more people can access the information rather than being excluded.

## **Case Study – Sophia and Colin (Deaf British Sign Language Users)**

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[Click here](#) to access a BSL translated version of the interview with Sophia and Colin (presented by Fiona). The full transcript is below:

Question 1: When do you use subtitles?

**Sophia** – I use subtitles all the time, only when they are available on the programme or film.

**Colin** - I have used subtitles on TV every day since I was a little kid. I use them on my mobile phone watching BBC iPlayer or any other things with subtitles.

Question 2: What makes them good/bad?

**Sophia** - The good things are that I can understand what they are saying, or talk about. The biggest issue I have experienced is when they are often missed subtitles especially when they are on live or news. I missed out a lot of information that I wanted to know what has happened something big, like important announcement on the News, ended up feeling as usual “Deaf always the last people to know” or sometime it reminded me of the feeling like when I was a child wanted to know what the adult was talking about, and they tell you “It’s ok, nothing important or never mind it nothing important for you to know”. I always enjoy watching Olympics or Triathlon, especially recently World Triathlon but the subtitles was awful delayed and I missed out so much information.

**Colin** - it’s a huge benefit to me and my partner watching TV so we know what they are talking about and what is going on. There is a problem when the TV is on live, like football live or breaking news on BBC or ITV and the subtitles is always lagging behind the commentary

describing things and it's really frustrating and sometimes missed some important information.

Question 3: How do you feel if there are no subtitles available, or they are wrong?

**Sophia** - It's so frustrating for me and my partner who is also Deaf, when we want to have a family time to watch film or go to the cinema with our 4 hearing children and then there's no subtitles available which leaves us facing the barriers or include our children facing the barriers if we decided to change other film or not go to the cinema. It's so unfair on us and them. Sometimes my eldest son would tell me that the subtitles didn't match to what's on the tv/film or the word was wrong such as we enjoyed watching "Under the Dome" which have 4 session, every time the character said the word "Jail" but the subtitles spelt "Gaol" my son found it so frustrating because he felt the need to check the subtitles at every time he hears someone mention "Jail" as we understand it's an old word for Jail but it's difficult for Deaf people who trying to understand the English Subtitles if English reading aren't their first language, it will cause them more confusing if using old fashion words!

I'm always annoyed if there's no subtitles available for deaf people, have always said why we must pay for full TV licence if we don't get full access as hearing people do!!!!

**Colin** – It is frustrating and I would have to work out myself what they really meant to say.

Question 4: What do you do if they are not available/wrong?

**Sophia** - Nothing.....apart from change to watch something different and still feel frustrated!! What else can I do, maybe I should make a complaint but who do I report the complaint to and then what will they do next? Because after seeing lot of Deaf people's experience they did nothing to make any improvement, so what's the point of me make a complaint.

**Colin** - Plain and simple, change the channel.

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# Audio Induction Loop System

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The use of an Audio Induction Loop System is important for people who are deaf\* and wear hearing aids that have been enabled for use with an Induction Loop. In the United Kingdom, as an aid for disability, the provision of an Audio Induction Loop System, where reasonably possible, is required by the Equality Act 2010 so this section will explain what a loop system is and why they are so important for people when accessing information in a live setting.

## What is an Audio Induction Loop System?

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Hearing Aids are designed to amplify sound for the user to help them hear things in their environment and allow them to communicate more comfortably. However, the hearing aid will work to amplify **all** of the sounds in the environment, and so busy places with a lot of background noise can still be a challenge even with a hearing aid.

The presence of an Audio Induction Loop System is sometimes indicated using signs like those shown below, and let hearing aid users know that they can make use of the loop system for clearer communication.



Figures 14 and 15 are images of two examples of the Hearing Loop sign that should be displayed in places where an Audio Induction Loop System is available. Figure 14 shows a black ear representation image on a yellow background, and features a capital “T” in the bottom right to indicate the “T” setting on the hearing aid. Figure 15 shows the same style image with the ear representation and the “T” but is a white ear on a navy blue background.

An Audio Induction Loop System (as shown in Figure 16) transmits an audio signal directly into a hearing aid via a magnetic field, greatly reducing background noise, competing sounds, reverberation and other acoustic distortions that reduce clarity of sound.

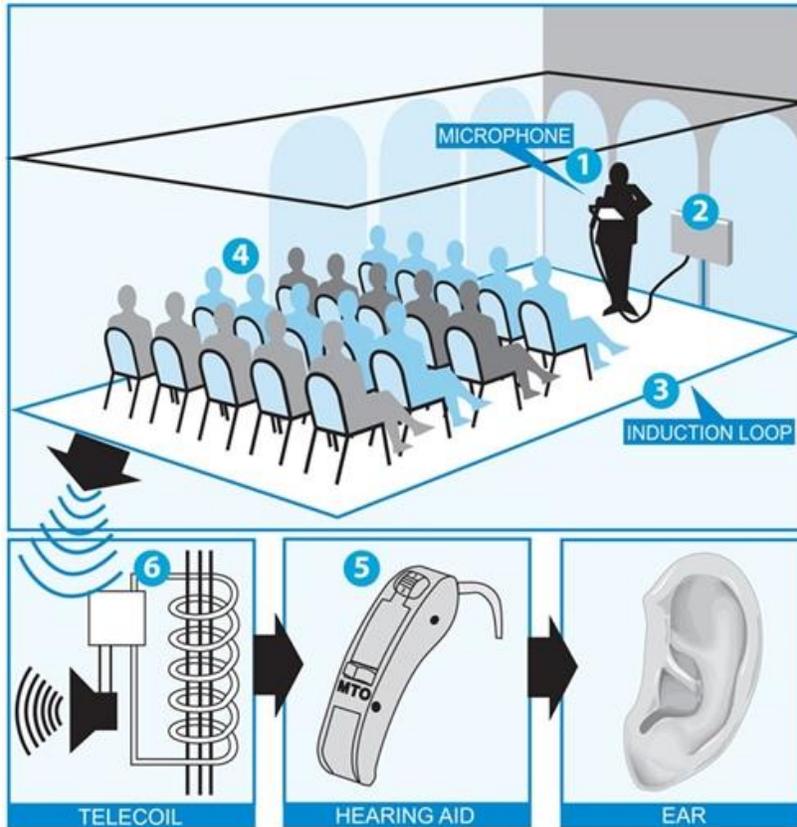


Figure 16: The image shows components of an Audio Induction Loop System. It includes an image of a room full of people sat in rows, with a cable running around the perimeter of the room. There is a person stood up presenting to them holding a microphone. There is an image of a coil to show the Telecoil in the hearing aid. There is also an image of a hearing aid alongside an image of an ear.

1. An audio input is provided by someone speaking into a microphone, or by connecting an existing sound system via cable/wireless signal.

2. The audio input is fed into the Loop Amplifier, which is usually a small box that could be attached to the wall or placed on a surface.
3. The amplifier drives a current into a loop, which is likely to be a section of thin wire running around the top or bottom of the room. It can also be portable and set up in a particular area such as a living room, or meeting space.
4. A magnetic field is created by the current running through the wire.
5. The hearing aid should have a function to allow the user to tune in to the loop.
6. This is done using a small coil known as a Telecoil, which picks up the magnetic field signal. This audio signal is then delivered directly to the ear of the hearing aid user. Telecoil is commonly shortened to “T” and is why signs often include the letter “T” to indicate to hearing aid users to switch their aids to the Telecoil or “T” setting.



Figure 17: The image shows a square shaped portable desk loop, which is black and made of plastic. It also has a sticker in the middle showing the yellow and black loop system image similar to that described in Figure 14.

Desk/portable loops, such as this one, work in a similar way to the system in the first example but they are more compact and helpful in situations where cabling a room or desk is not possible and to allow more flexibility for meeting locations. They need to be plugged into the mains or charged prior to use. The audio input is received through a microphone in the rear of the device and transmitted as an electromagnetic signal from the front of the device. This works well for small meetings with 2 or 3 people, or for over-the-counter interaction such as that of a reception desk in your local doctor or supermarket

checkout due to typical signal range being around 2 metres from the device.

## **Case Study - Sylvia**

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[Click here](#) for an interview with Sylvia, presented in BSL with subtitles and audio. The full transcript is below:

Question 1: When did you first use a loop system?

I was introduced to the loop system during a volunteer meeting at Deaf Action a few months ago. I have worn hearing aids for the past 13 years but no one has ever explained to me what the loop system was and how it could help me. I noticed loop signs in some banks and supermarkets but I never really thought it was relevant to me.

However, after my first experience with a loop—a portable one, I had mixed reactions. The first was a very pleasant surprise. I was able to hear the speaker directly through my hearing aids, it was very clear, I did not have to focus as much on lip-reading anymore and the background noise was almost eliminated. I was able to hear speech clearer than ever before. After the initial shock and elation my feeling turned to anger. I was never told what a loop system is, which I am assuming it is the Audiologists job to explain. I realized that I have missed out all these years on using the loop, when it was available. It could have made lots of situations less difficult or frustrating for me,

having to rely on lip-reading and standard input from my hearing aids. I now make sure to use the loop system whenever it is available. And I hope the loop is introduced to more public places and shops in the future.

Question 2: How does using a loop system differ from just using your hearing aids?

The difference (between a hearing aid on the normal setting and when using a loop system) is quite astonishing. With a loop I could hear the speech much clearer, and understand almost everything. I did not need to focus on lip-reading much which usually becomes exhausting after some time. I did not even need to constantly look at the speaker to be able to understand. And in a meeting setting it was much easier to follow the speaker's speech and understand what he was saying. The background noise was also minimal. My hearing aids on regular setting don't even come close to giving me that speech clarity and are constantly picking up all background noise which greatly diminish my ability to understand what is being said.

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# Credits

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We would like to thank the people involved with creating this Accessible Information Guide for their valuable input and for sharing their personal experiences.

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Glyn Thompson – SDS Joint Sensory Project Coordinator for the creation of the document and coordination of the accessible versions.

The Guide to Accessible Information is free to access and share, so please pass it on and contact us to offer your feedback. We also have alternative formats of the document, so please contact us to request copies.

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