SARAH: Welcome everyone.

We have just started our live broadcast, looking at technology and hearing loss. I'm going to wait a few moments just to allow for everyone to have an opportunity to join us.

We have an amazing line-up today. I'm very excited about the Webinar. We have got a couple of exclusive pre-recorded sessions, which we will be sharing with you.

Then we have Mark here from Signly and Jesal from the RNID, who is going to give us loads of really rich information, I know, about the types of assistive technology that can support people.

I will just keep an eye on the participant numbers. When they start to level off, we will do proper introductions and housekeeping.

In the meantime, if you do have any technical queries, please do use the Q&A button, my colleague, Chris Grant is in the background.

He will be able to help you out with any technical niggles and glitches.

As you can see, we have BSL today.

Please do pin the signer to Zoom if you need that support there.

The numbers are still going up.

I just noticed; I didn't put my name on the opening slide. I’m Sarah from AbilityNet. We are hosting the Webinar today.

As I said, really excited to be doing so.

I work in the marketing team.

I'm here just to facilitate all the great speakers we have got. I will be handing over to them as soon as possible. I'm sure you would rather hear from them, than from me. Participants are still just climbing up. I will make a start.

There is a little bit of housekeeping first and then we can get into the meat of the session. As I said, we have some fantastic speakers today. Unfortunately, Rachel from Lloyds Banking Group is on holiday and can't be with be us today. But she has pre-recorded a video, exclusively for us and we will be coming to that very soon. I'm delighted that Mark has joined today, and he has been really supportive in getting the great line-up of speakers together.

Mark is co-founder at Signly and then we will pass to another video of

Victoria, one of Mark's customers who will present a demo and talk about how Microsoft is embracing this technology. Then we will be over to Jesal to talk through some of the assistive tech. Then I'm hoping we will have plenty of time for your questions and answers at the end.

Mark will filter any specific questions to do with Signly we have Chris in the background as well, who is very knowledgeable also about assistive technology.

So, in terms of housekeeping. As you can see, we have live captions coming up at the bottom of the screen. BSL is available throughout the Webinar. Please do use the Q&A window to ask questions for tech help you need, or for questions for later on.

We will be fielding questions to the panellists. We will follow up on that afterwards.

We have turned off the chat window. That is to make it easier for us to have one channel to monitor. But there are also accessibility issues for that.

Anyone using a screen reader, tends to read out anything that goes in the chat that can be distracting. You will receive a slide, the transcript and a recording after the Webinar.

You will be notified about that via e-mail.

If you missed anything, you will be able to watch the recording there.

And the link will also include a link to a survey monkey so that you can give us feedback and we really welcome that.

We aim to improve these Webinars as much as we can. We will be having a brief introduction from AbilityNet and hearing from Rachel about the business case for inclusion.

And we will be talking about Signly, Microsoft case study on how they are using it. And then we will be hearing from the RNID and then that Q&A so, this is a welcome to our panellists again. I thank them for their time today and for their time in prepping. In terms of our own services, we truly believe in a digital world accessible to all.

There is a quote I like to use which is that today is the digital world is the world for a lot of people, we are all accessing products and services online and it is important that there is equal access to that.

And that goes to the core of everything that AbilityNet does.

In terms of our free services, we have a team of over 300 volunteers, who support people at home, in terms of signposting, in assistive technology.

We can provide remote support in terms of adapting text so that it works for your individual needs.

And we are beginning to do some face-to-face services, as we slowly return to normal.

Really delighted to be doing that as well.

We also have accessibility products and services and that is our consultancy services.

So we work with web developers, app developers, to make sure that their digital products are accessible to all.

We support people in education. We have a range of workplace services, and we also have two flagship shows,

Tech Share Pro is the largest UK event in terms of convening people from the accessibility community, to talk about some of the important issues that are shaping the digital world.

And we will be hosting that again in November this year.

So, this is a more in-depth look at free services for individuals.

I'm not going to go through everything here, but the slide deck will be available afterwards.

There is a number there for our free helpline. As I said, we will be resuming our in-person support. We will be continuing with remote support. We have a range of free services online, including My Computer My Way, which gives step-by-step guidance on how to adapt a ring of technical devices for your individual needs -- to adapt a range.

We have a regular blog and free fact sheets, including one on hearing loss. And this is part of our series of free webinars for AbilityNet Live and in the background, we do lots of community work, fund-raising and corporate relationship building as well.

So, I will pass over, virtually to Rachel, now, who, as I say, recorded this for me before she went on holiday, from Lloyds Bank.

Sorry, I have some statistics.

Just to highlight the fact that there is a genuine need and I know Mark will talk about this later, this unrecognised need, still, for 11 million people to have access to a range of services. There are approximately 151,000 people in the UK using British Sign Language and of those 87,000 are Deaf. And around 12,000 people in the UK using cochlear implants.

I will hand over to the video from Rachel now. She works in the Responsible Business Division at Lloyds Bank and is a really passionate advocate, as you will find out shortly, for these types of services. Rachel is a child of deaf adult.

She is really passionate, I can definitely speak for that, and you will see that as we kind out in the video now. I will hand over to Rachel.

CHRIS: There is no sound, Sarah.

SARAH: I will try again.

RACHEL: I think it is really important for businesses to think about that. So, for example there, maybe somebody who was born profoundly deaf who is a British Sign Language user and they will require a British Sign Language interpreter, if they go into a branch or into the store. They potentially would need signed video service to make a telephone call. How do they read your information on the website?

Because British Sign Language sentence structure is different to English. So thinking about how do they read your message, how do they read your e-mails? How do they read your website? And for people who have hearing loss, they may actually be able to use verbal communication quite clearly, because they lost their hearing at a younger age, which will be that they do have very good speech.

And they could commission SMS or a relay service, -- they could feel confident that because they are confident using English as a written language. How do they communicate with you, if they need it make a telephone call? So, there are lots of different service that is are available to support a range of needs.

SARAH: And what do you see as the business case for making services accessible to all your customers?

RACHEL: I supported my mum and dad during lockdown to access shopping online. Phone numbers weren't accessible for the Deaf community, especially if you were a BSL user, there was no signed video option there. If you went to a store to go and click and collect, and when we arrived, they called us into the click and collect carparking space and the sign

in front of us said "please ring this telephone number to let us know you are here" not even an SMS text. That for me is the end-to-end journey, accessible design. If we design a video conference that has supported people who can't get into a branch during COVID. But that would not have supported people to go into a branch pre-COVID.

We should be including inclusive design, so it is open for all means at every stage. And people have any interests to invest or save and it could be that they are looking to buy their own home to buy their own home and don't know how to do that.

RACHEL: From Lloyds Banking point of view, we have looked at the deaf community and looked to see how they want to access our products and services. We have Signly on our website, where that enabled a BSL user to go on to the website and what text they would like or pages and if you press the pages to be translated into British Sign Language. Lloyds was the first one in 2012 to launch a signed video service as well. With our website and our videos, we are captioning our videos and we have developed educational material, across a range of needs and disabilities but which also includes British Sign Language translations and captions as well.

RACHEL: COVID has really brought on the digital needs, so people are using the digital channel and you can see that, with people transactions. I think for us, yes, that is a great opportunity to support customers through the digital channels.

I am excited by the future. COVID has enabled us to go faster. What I'm seeing, not just in the UK but in Europe and globally as well. There is increased interest in this.

SARAH: Thank you to Rachel there.

And now I will just hand over to Mark, just to tell us a bit more about Signly, which features in Rachel's video there. Mark, welcome.

Really delighted to have you here.

Perhaps you could start and I know your journey does partly start with Lloyds Bank. Tell us why you designed Signly and how that came about?

MARK: It starts a little bit before Lloyds Bank, to be honest and first, I need to say that I don't in anyway speak for Deaf community. This is my personal story.

I was doing digital work in corporate, my agency partnered with a deaf charity which really opened my eyes to issues I had never heard of. I felt quite embarrassed.

I had never really heard or known much about the Deaf community, about Deaf culture about a demographic for whom sign language is their first and preferred language.

I had this ignorant assumption that if you wrote stuff down, it might be OK in English.

And the charity were patient with me, explaining, that I thought - how come I'm 40-something years old and nobody has explained this?

It felt wrong.

My agencies do pro Bono work for the charity, and they asked to make an app. In my day job I was using augmented reality.

In the first instance as a hobby project, I added sign language to leaflets. And it was decided to be used in the museum for deaf schools so they could have a BSL tour and incredibly BBC News picked up a press release about it. It ends up on BBC breakfast for five minutes and the following week Lloyds phone and say - can we show this to Deaf customers?

So suddenly literally something we were doing in our spare time is being looked at by Lloyds who invited Deaf customers who liked the basic idea but who said - actually, can you move the sign language on to our website, on to Lloyd's website?

It would make more sense to have a digital-first approach. So Lloyds looked at me at the meeting and said - do you think you can pull the technology? I said, yes, I think you can if you help us. So, I shut my agency and focussed on supporting the technology and we are at the stage now where we think, possibly, in terms of volume of sign language, Lloyds is one of the world's most Deaf-friendly websites.

SARAH: That is fantastic story, thank you for sharing it with us. It encapsulates that thought, that spirit of openness through that feedback, really, in which you were willing to admit what you didn't know and to run with it and you had that kind of digital background and skills and experience to bring that to fruition.

Fast forward to today, where are you now?

MARK: We have had a little support from Microsoft in terms of scaling the technology, they put us through their AI accelerator which really helped.

We are working with Deaf organisations in Australia who have a keen appetite to increase access and also Microsoft in the States and in the UK, are looking at whether they can do a better job of mainstreaming access to sign language. So, yeah, we are doing OK.

SARAH: That is great to hear. And what does the future hold? I know we heard Rachel saying that she was, or she is excited about the future, but I know there is that genuine need and your own passion for accelerating this message and a need to embrace the Deaf community and make sure all services are accessible. What does it mean in terms of the future for Signly and for you?

MARK: Back to my story and where I was four or five years ago the bit I couldn't understand about the lack of access for Deaf signers is for blind and no vision users there is so much provision, screen-readers ubiquitous, smart canes, Microsoft seeing AI, Braille, large print. So much stuff and it felt like technology, it is not a panacea, not a solution for all of this but it has a role to play.

In terms of the future, more broadly. I think it would be good if there was more mainstream access to sign language and technology can play a role.

For Signly, specifically, I'm kind of getting to the stage where I have done the technology bit, which was the bit that I was good at, and we need to think about how we start to transition Signly to be Deaf-led and we are starting that process in Australia already.

SARAH: That is fantastic news.

And in terms of, you mentioned Microsoft, I'm going to pass over to Victoria from Microsoft now, to give us a bit of a discussion. And one of the things she talks about is the fact that Signly makes it very easy to embed, so just to pick up on that thread there, I wonder if there is anything you would add to that before I hand over, in terms of, you know - this is a tech solution, as you say, it is not a panacea, but anyone who has concerns about how to do it.

What would you say to them?

MARK: For any idea to scale across the piece, it has to be quick, easy and affordable.

I used that knowledge I had from digital when we created Signly so the integration with Microsoft, we handed over the code on Monday. They integrated the code on Tuesday and the Deaf translators were working on content on Thursday which went live on the Friday. So, it was pretty pacey and easy.

SARAH: That is fantastic, and I know Victoria will back you up on that virtually now. So, I will, without further ado hand over to her, thank you very much for now, Mark. I will introduce Victoria in her absence.

She can't be here today either. She works in the Story-telling & digital destinations lead at Microsoft UK and is keen the stories reach everybody in the community. Really cares about content being useful, interesting and easy to digest and accessible. And she was very kind to share some time with me and to talk about Signly and how Microsoft integrated that.

So, I will hand over to her video now.

VICTORIA: I'm Victoria Oakes.

I work at Microsoft and I'm the story-telling and digital destinations manager.

I manage all of our content and websites for the UK. I'm a white lady, in my 30s. And really happy to be here today. I have also got a Microsoft background behind me. We believe in economic opportunity for all. A study revealed that the UK economy could use 36.6 billion a year in economic output if we don't include Deaf and hearing people in our economy.

So, it is really important. We would always translate content in other languages, why not BSL? We saw this programme late last year and were impressed with the technology they had to offer. The technology translating the website content into sign language and BSL, we wanted to pilot with them. And that really supports us to address that accessibility gap.

We don't want anyone left behind.

We managed to do it quickly, we implemented within a week.

It took planning time.

The tech is easy to use.

We wanted to do a social value report with Signly to see what the impact is on society and Deaf people and to see if this tech could really work. Themes are that we feel more equal, we feel included, it is good to get content in our language.

One of the comments is that stood out, is that it has been really good, I can get information myself it has been over 30 years, to get the information again and again. And Deaf people can't always rely on interpreters.

For Microsoft we want to lead the way and hope others pick up on this technology. There is over 1 billion plus people with disabilities and Microsoft want to make sure they are included.

It can be a real differentiator as well.

SARAH: Thank you to Victoria and saying there that implementing that was really straightforward. I would like to talk now to Jesal from the RNID and I know you are going to talk specifically about the breadth of tech available that can help people and support them in accessing the digital world.

So rather than read this out, as you are with us today, I will invite you to just introduce yourself and your role at RNID.

JESAL: I have been working at RNID for seven years in this space. Quite a bit of knowledge about assistive tech. My role is mainly to work with user, for people who experience deafness and really to get an idea of where they are struggling, what works and where there are gaps to try to fill that gap with new technology.

So it is very much around informing people of what exists and where there are gaps to try to find some new innovation, kind of like what Mark has done and to make people aware of that.

So that is the bulk of what I do. And then a little bit about it is also quality, so influencing Government to make sure that they make the most of what is available, and you know, technology can be quite expensive, to make sure that

Government also makes it as available as possible, without a cost falling on the user themselves.

SARAH: That is brilliant.

Thank you very much.

I know you have kindly provided some slides for us.

So, if you would just like to let me know when you want me to move forward and I will hand over to you.

JESAL: Thank you Sarah. To just taking a little bit of a step back and just kind of giving you a visual representation of what hearing loss actually is and what a typical person with hearing loss would experience in their day-to-day life. This picture is of a very busy environment at a train station, lots of people very echoing, a very difficult listening situation, even for someone with normal hearing but then additional difficulty for someone with hearing loss.

If we go on to the next slide. We are going to use this gentleman at the front as our example. He has a typical hearing loss. As you get older, you start losing the ability to hear high pitch sounds, high frequency.

And with that comes clarity. You know something is going on, you hear the noise but picking up the clarity can become quite difficult.

Moving on to the next slide: He is sitting in between two people that he wants to talk to. And that can be quite difficult when you are in that busy environment. So when you have hearing loss - we will move on to the next slide - this is typically what happens. Everything becomes quite dim, and it is really hard to pick out what it is that you want to hear. If we move on to the next slide. The most common way to manage a hearing loss and one of the most successful ways to manage a hearing loss is to use hearing aids. What hearing aids typically do is they give you the clarity back. However they can be limited.

They work well when there is no noise, just a couple of people talking, but as soon as you are in this kind of difficult situation, they can be limiting.

So from the picture, you will see that you get some of that clarity back. You get some of that vision back, but it is not as crisp as it would be if you had normal hearing. So, assistive tech, essentially helps you pick out clarity of the person or a group of people that you want to hear. So in this situation, if this gentleman was using an assistive tech device he would be able to pick up the person next to him, trying to reduce the background noise as much as possible and really pick up the speech sound that he wants to hear. Move on to the next one.

I will spend the next few minutes, talking about the different types of assistive technology that are available, the most common type. The first one you may have seen as you go around, most public places you will see this loop or telecoil sign. What it means is that you will have a microphone that is attached, to for example, if you are at the bank and, with that microphone, you can hear the sound directly, either into your hearing aids or through the headphones if there is a telecoil.

And what it does, is it reduces the background noise and helps you pick up the specific speech sound you want to hear.

They are also available on telephone. They are available on telephone, so a lot of people don't realise that a lot of phones and land line phones have this option. So as hearing goes, you start using visual cues, without realising and you start lipreading, so when you are on the telephone, as soon as you can't see the person, it becomes difficult to understand is going on. Things like a loop on a telephone can help to improve that clarity as well.

The second part of assistive technology is what we call "remote microphone". It removes the distance between yourself and the person you want to hear. So, at the train station, a lot of the noise comes into your ear before the speech of the person you want to talk to. If you attach the microphone, you clip it to someone's clothing or they wear it around their neck and then you will be able to hear them more clearly above the background noise.

This tends to be the most useful at a conference or something like that, where the person is quite far away, so you will be really able to hear what they were saying, as if they were talking directly into your ear.

The third type is what we call amplified phones, these are typically landline phones. They do kind of what the name says, they make everything louder. Again, it is really helpful on the telephone and most of them won't just amplify sound, they will have some level of personalisation where you can adjust the tone, specifically.

So again, you can boost the higher pitch sounds to give you some of that clarity back.

The fourth type is what we call "alerting devices" how these can come into two categories. So they can be critical, like for fire and smoke alarms. What it does is when the fire or smoke alarm goes off, you get a flashing light to tell you that you need to act, that an I alarm has gone on, or you will get a vibrating pad, that typically goes under your bed when you are sleeping, so you are alerted when there are sounds that you cannot here.

I will pause, because I think they need to change interpreters.

So, those of your critical alert and then every day alerting sounds. Most of us take it for granted we can hear the doorbell when it rings but for someone with hearing loss, they will typically miss these alerting sounds, so again, they will get -- alerting sounds, so again,

alerting devices with a flashing light or another mode to alert you that there is someone at the door or your kitchen appliance noise is going off.

Typically, you can get lots of different types. Traditionally, they used to be quite fixed devices and very specific to a certain device, like a doorbell, for example. Now, with smart-home technology evolving, this is mainstream. If you think about something like the Ring Doorbell, it was never designed for people with hearing loss but being able to see that person on video and getting an alert on the smartphones, means they are getting an alert in the way they want it to use it, that is useful for alerting people, especially in the home, the different sounds going on around them. The last section I want to cover is smartphones.

Smartphones have made a huge difference to most people with disabilities and that includes people with hearing loss and deafness. Most people won't realise this but, on the smartphones, you will often have an accessibility folder and within that there are hearing enhancement features again, it'll be things like extra volume boost.

You can set the tone and increase the volume where you need it, rather than amplifying everything. Along with accessibility features of audio enhancement, you also often get live captions. So, most of the phone also have their own live captioning system, which will often be used for videos that you watch on your phone, like YouTube. And then some of them will even allow you to caption things like voicemail or voice calls.

But these are quite specific in different devices. Along with accessibility features there are so many apps out there to help people, to alert people, and there will be live captions when you are out and about and you want to talk to someone and you can't quite hear what they are saying, you can use live captions in that environment.

There are lots of things to help and once you start looking at all of these things, you will find yourself going down a rabbit hole.

But there is a lot of information. If you are looking for information on the accessibility features, I know that AbilityNet have information on their website, as well as RNID if you want to explore that more.

SARAH: Thank you. That was fantastic. I will not dwell on it now. But for now, Chris, if I pass on to you, do you have questions coming through.

CHRIS: One question has come out, I think, I will open it to the panel: Someone has asked: Different countries use different sign languages. How is this managed by a company like Microsoft, which is global? I think that is a great question.

Maybe Jesal or Mark, maybe for you?

SARAH: Mark, I think you are on mute.

MARK: Yes, so the web address, it is like Microsoft.com/GB, that would be British Sign Language and then if it is/US, it is American sign language and so forth.

So, it is easy.

CHRIS: Thank you. I will come to you on this one, a great one on the tech from Emma. What technology is available for using a phone with a headset at work for a phone and Teams, I have new Bluetooth capable head phones.

JESAL: With the workplace there can be several different things that can help. Some workplaces are specific depending on the laptop or phone device you are using as well as the type of hearing device or headset you are using. Now, generally, there tends to be lots of connectivity options. Sometimes you can do a direct input, or you can have that Bluetooth connection, but it is really specific with the type of device you use. The best advice is to use Access to Work. It is a funding pot which allows you to get someone to come and assess what you need for your workspace to make it as accessible as possible.

And they can recommend the right device for you and they also provide it free of charge with, as well, with your employer sometimes. So, I would recommend looking at Access to Work.

CHRIS: It is great when we have the new technology coming out and folks are saying - what can we do to make it better?

Emma, is saying thank you, but so far they have not replied. Hopefully you will get a response.

SARAH: While we are waiting for any other questions to come through, then, I will just ask Mark and Jesal, this has been a trend that we have been following, in terms of how COVID has affected different communities. I just wonder if you would like to share your insights, you know, on where there have been improvements for the Deaf community and some of the challenges that the people you are working with have faced during these difficult times.

JESAL: As you can imagine, it has been a tough time for everyone. The biggest issue we have faced is face coverings. I mentioned in my presentation, lipreading is something people with hearing loss and deafness rely on heavily. In the absence of being able to read lips, it has been difficult for a lot of people. We have kind of had to work with the Government to make sure that there are transparent clear face masks available and while those are easy for public use, in healthcare where they have to meet certain regulations, it has been a lot more difficult to achieve. And the second biggest challenge has been around BSL content in Government kind of - you know when they were telling everybody what was going on, in the daily briefings they had, BSL was absent.

It was a very clear problem for us, we have had to try to influence the Government to start providing BSL in the briefings they produced.

SARAH: You might know more about this than me, wasn't there an individual case that brought that to attention, and I think there was a positive outcome there, wasn't there?

JESAL: Luckily, they were forced to provide this, but it is a shame that they had to go in that direction. We saw other countries doing it right from the get-go and doing it really well. Unfortunately, we had to really push Government to provide the BSL.

SARAH: I know there are a few questions coming in now, but just for you, Mark, I have seen quite a lot written about online meetings and the fact that closed captions are available and that is great. I will come back to what you said earlier about your learnings and what Rachel said around BSL being many people's first language.

I wonder what your take is on how well that has been supported, in those types of online meeting environments during the pandemic?

MARK: Again, it is hard, isn't it? I know Microsoft have had quite a lot of feedback, this is about all I know about this topic I should point out but Microsoft have had a lot of feedback from sign language users across the piece and are trying to implement some features into Teams.

I think - well I have - we have all struggled with the technology, so there is definitely room for improvement. I think the one silver lining to COVID is that organisations are really getting the fact that online systems have to be accessible for users start it finish, if you cannot accession face-to-face support, you cannot pop in somewhere to sort out problems -- you cannot access.

SARAH: I was struck about that, when Rachel said about her trip to the supermarket, the fail at the end when there wasn't the SMS support. It highlights the end-to-end support. Chris, are there any more questions coming through.

CHRIS: A fair through, we will start with Emma on the chatbot who says - I will merge the two questions into one. So - "I have struggled to find a face mask that is see-through but breathable, is there a good solution for this." And on the flipside, Emma is saying on the chat "I know our surgical team have been looking at getting see-through masks, as well as visors when we know they have a Deaf patient, and they have looked at getting BSL interpreters as well.

That is good to know. I will open that up to the panel as it'll be something that will be around for a while.

JESAL: There is one clear face mask available for clinical use and we have encouraged staff to use that when we have someone with a hearing loss or BSL user, if they require it but it comes around awareness. As most will know there is poor deaf awareness among the public, including health care providers, so really making them aware this is required, and unfortunately the onus does require more on the person to tell them they need this.

They are available but unfortunately it does depend how aware the service is of these things that are available to them to use.

CHRIS: Thank you. Mark, I will come to you with the next one: Is it possible to implement Signly in languages, such as Norwegian?

MARK: Yes.

CHRIS: That was a great answer.

MARK: A simple answer.

CHRIS: Tell us, who do they implement it that way?

MARK: We will not get too technically. Signly sits in Microsoft's tech stack. So Signly, once a little bit of code is dropped into a content management system of a website and it takes less than five hours to do that, so whoever runs the website, has to do about five hours work Signly grabs all of the text, and fired it straight into the auto cue of the Deaf translator, they work from home. They don't need a studio environment or a camera person and editor, they stand in front of the autocue, a foot pedal starts recording, they sign the content, press the foot pedal again and the content spins up for them to review it and check they are happy.

They can peer moderate it or send it to another translator, although generally it is not needed. So, they send it in, and it appears on the website. It is quick and simple. If the web page changes at all we see if there is not a match. If a paragraph has changed. Let's say if it is an interest rate and one character has changed that paragraph will be removed and it says "we are translating new content" the rest of the page is visible. It is that quick and easy.

CHRIS: Great. Sounds dead easy. I will come back to yourself, Jesal. I will merge the two questions, more tech questions. One from Cara saying where do you, each - I will leave it for now actually, I will come on to Rick "How well does the Deaf community like auto-captions for live captions in Zoom, MS Teams, etc. Good, or bad? What do you within the RNID? What are people's comments?

JESAL: Obviously with people using these systems more, at the beginning of lockdown we did try to do a little bit of research to see how people were getting on with the different platforms and it is so variable.

Live captions can be really difficult, as soon as there is a poor internet connection, if there are accents, depending on the type of device they are using. It can really vary in terms of clarity and the speed. It is really difficult to say which one is better than the other. People just have different experiences of them all. What we have advised is, especially for important calls like, if you are talking to a healthcare provider, if you are talking to your bank, anything like that, the best way is still to use a text relay assistant, where you have someone physically typing what is being said, so that is for the accuracy and the speed, it is better in that situation.

CHRIS: Excellent. We obviously have a live captioner here today. I know lots of more organisations are pushing towards live captioning, instead of using the in-built. Thank you, Trish, always appreciated. I'm going to come back to you in a minute, I will ask you both the same question. Mark I will start with you. I feel like it is Question Time on TV just now.

Where do you see assistive technology going in the future for the community?

MARK: It is not a panacea, as we said earlier. I think what is interesting - and I didn't expect this - is that it can start good conversation. Tech starts good conversations, because we all like a shiny new piece of tech, right. So sometimes we show Signly and people are - that's great, then they say: Why do we need that? Why is text not enough? I think ultimately change happens because of awareness and culture and actually, the tech that is quite easy, by comparison. I thought creating the tech would be really hard. In comparison to actually the awareness issues, that are out there and finding organisations that have the right culture and the passion and do care, that is actually the hard bit.

CHRIS: You make a good point there.

SARAH: Can I hop in with a question there.

CHRIS: Of course.

SARAH: To follow up on that, I wondered, as you were talking earlier Mark and also maybe for Jesal, of the role of people from the community, as user testers, actually, and what role do you see in terms of that, and whether there is a greater awareness of that need for including Deaf people and people with hearing loss as part of the development of the assistive technology? I don't know if anyone wants to take that one.

MARK: I think in terms of developing a product, you will always have your users close to the heart of what you do. Ultimately it was Deaf users who said - could you move this technology on to the website? So, it was really their idea. So that needs to be almost like an ongoing conversation. I think in corporates, it is quite difficult for them to have that ongoing dialogue. So sometimes there is a lack of awareness and because it is quite hard.

Well, it is quite hard it complain, full stop, but if you are Deaf it is possibly even harder, so these issues are not coming across the corporate's desk every day because the voices aren't being heard. So, I guess just having that regular dialogue with customers and users, it is obvious but maybe it just doesn't happen enough.

SARAH: I guess the same is true in the advocacy space, would that be fair to say, Jesal, on that front?

JESAL: I mean, it has started to become more of a normal culture with text developers to use them and have them at the centre of development that. Is a great thing. Previously we have found someone who has come to us and said - I think this is really useful for someone with hearing loss and someone who is a BSL user and then there would be a gaping problem with the solution because they just didn't talk to the person who was going to be using it at the end. You know, I can't see a reason for people not to use the users when they are developing these things. Unfortunately it is becoming more and more normal, from very small start-ups to the big kind of tech companies and we are seeing them come to a head. You know, the traditional assistive devices that were built specifically for certain people, they are starting to kind of wind down and people want mainstream technology to be accessible and to be usable for everyone. So, there is a real incentive for even the really big tech companies now, to make sure they design tech that is accessible for everyone.

SARAH: Any more questions.

CHRIS: It is confusing between the chat and the Q&A but there is a lot of talk around audiology and people struggling with the audiology departments, through their masks and through support.

That was quite interesting, reading some of that in the chat.

I will merge these two into one, I'm conscious of time. Both tech questions. So I will come to you, first, Mark, if that is OK: How can I increase the volume on the computer above 100%? I didn't even know you could do it. Can you?

MARK: I don't know. I don't know, to be honest. It reminds me on Spinal Tap, go up to 11.

CHRIS: Jesal?

JESAL: On the device you can't already health and safety issues, when we are talking about every user, we don't want to damage people's hearing. There will be a cap on all devices as to how much you can increase the volume. If you need more volume than what you are getting from the device alone, you can use an assistive device next to it. Can be as easy as a speaker that attaches so you can get more volume, or you can have specific headphones that have sound enhancing feature. Unfortunately there is no going above that 100%, but you can additional devices to give you more boost.

CHRIS: Still on the volume point then, Maggie is asking: Where can I get help with variable volume levels linked with my Oticon streamer?

JESAL: I'm not sure I understand the question fully, but if you are having difficulties with your Oticon streamer, go back to your audiologists, these things are set up specifically to work with your Oticon hearing aids and outside of the details and the connection that we have they clinic, it is really difficult for anyone else to make those adjustments. That is your first point of contact. Often if you contact the manufacturer themselves, they will have someone the in tech team that can talk you through these things. Those two are probably the first places to start if you have any difficulties or want to make any adjustments.

CHRIS: And Sebastian is saying in the chat, like what you said there, is the advice needs to come to the audiologist and Oticon tech are really good. Thank you for that.

And a final comment, I think that has been made by Lee in the chat "I believe that the Link from Staff Networks to corporate executive teams is vital, as the lived experience on the ground can pass on the gaps in missing tech and need to progress and invest with urgency.

Very much correct, great point, Lee. That is all the questions, Sarah.

SARAH: Thank you Chris for walking through those. I will do a timecheck. I think we probably have time to expand on one more. Jesal I was wondering if I could come back with you to talk about the smartphone-type devices and how to people going about accessing the accessibility features on those. We have certainly noticed this they are being brought more to the surface. I was wondering if you could give us more detail on what is available and how people can access those across different platforms to signpost people in more detail there.

JESAL: Sure. Just to note it is not just with smartphones, you will probably find it

on your laptops and almost every device you have. If you go into the settings folder within, that there will be an accessibility folder, it starts with basic accessibility like volume and more and more companies are providing personalised sound much -- basic adjustments.

So that will allow you to take a hearing test and adjust the sound based on that test.

Others, you adjust yourself. Some of them will have pre-set levels, so they will suggest someone who struggles with a mild hearing loss, use that setting, someone with a

slightly more severe loss, use a different setting.

So that is the minimum features that we have seen in a lot of the new devices.

You often get the loop system as a default feature in your smart, mobile phones as well and that can really help. Bluetooth is also really great. By streaming that sound directly into your ear removes a lot of the background noise when you are trying to make a phone call.

And provides the sound in both ears, as opposed to just holding the phone into one side, which can help improve phone calls for people. Play around with the accessibility features.

I think the problem is people don't often know they exist for hearing loss but they are there and I would advise everyone to have a play around with them.

SARAH: That is fantastic. Thank you very much. So I'm going to end the Webinar there.

But, before I do, I just wanted to say a final thank you to the panellists and also to Victoria and Rachel who gave me their time to create those videos before the event, it is a shame they weren't with us today but great to hear from them anyway. And thank you to everybody who has attended the Webinar, asked questions. As I said there will be an e-mail follow-up with all the information and also some additional links to some fact sheets that we have and some resources on our own website as well. Thank you the BSL and caption support for today as well and to Chris for supporting me in the background in fielding those questions. I hope everybody has a fantastic day. Thank you very much and goodbye.