



# Internet Society

## Accessibility SIG

### When rhetoric meets reality: Digital Accessibility, Persons With Disabilities and COVID-19

Internet Society Accessibility Special Interest Group - May 28 2020

**MUHAMMAD SHABBIR AWAN:** So, hello, everyone. I will start the webinar right now. This is Muhammad Shabbir Awan. I'm the president of Internet Societies accessibility special interest group. Ladies and gentlemen, let me first of all bid you a very warm welcome and ask you a big thanks for joining us today. We have people from different regions and also on different disabilities. We have a good team that is technical team consisting of Joly MacFie, Naveed Haq, and a lot of others. So thank you very much for -- once again for joining us today.

Ladies and gentlemen, this webinar is first in a series which is on a very significant subject considering the times and the age that we are all living in. And that specifically means the age of COVID-19. This signifies the importance and significance of the accessibility of the digital technologies and digital technologies have made so many things possible, so many things enabled for everyone which would not have been possible had there been no technologies.

So what -- we are not demanding anything unique. We are not demanding as persons with disabilities anything new. We're not demanding anything which is impossible. We are just asking for the digital devices and the digital environments to be made accessible for everyone because digital technologies, they don't see your physical attributes. They just see how developers made them, how developers create them.

So we are just asking to make these environments accessible for everyone. They should be open and friendly to everyone. And we will listen to different perspectives during this webinar.

As I said in the beginning, this is our first webinar in a series of six or seven webinars that we as accessibility special interest group for Internet Society will organize over the next coming six or seven months.

In this webinar we will just give an overview of different regions, different countries, and different disabilities. In the series which will be held in the one or two webinars in the next months you will see the details on the social media as well as on the different platforms that you get the information from.

So these would be on specific topics. So what we'll do today is that we have a wonderful speaker, a digital web expert, David Berman, who will share his experience with us as our keynote speaker. Then we will have some experience sharing from different people and from different people with disabilities as well as from other persons and from different regions.

Then we have -- we will have a small portion for question answer which will be very significant, because this will be a portion where our participants will be sharing their views with us. Before I invite our first speaker, I would just like to mention here that we have, thanks to (?) we have two sign language interpreters for our deaf friends. We also have captioner with --

**JOLY MACFIE:** I have to say Muhammad, that our signers have disappeared for the moment. We hope they come back.

**MUHAMMAD SHABBIR AWAN:** So we also have the captioning for the hard of hearing and for anyone else who wants to see that. Yes, it is technology and there are certain difficulties which we will combat and we'll try to overcome. Meanwhile, if you have any questions, you can put them in the chat. And if you have any specific comments or if you want to raise your voice, you will get the time after our speakers are done.

Ladies and gentlemen, without further ado, I would first like to ask David Berman who is the founder and chairman of David Berman Technologies from Canada. He has have very vast experience with working with the governments on making websites accessible for persons with disabilities.

David, will you be able to tell us how is your experience of working with different governments, how it has been and how you have found governments receptive to making their digital environments accessible for persons with disabilities?

**DAVID BERMAN:** Absolutely. Shabbir, thank you so much for letting me be a part of this event. Before I get into government I want to explain I'm wearing a mask, a COVID-19 mask. However, it's different than most because it's designed by a double pandemic here, Sarah Bloomfield, a nurse in northern Michigan had a coworker who is hard of hearing and who relies on lip reading to be able to communicate. So she designed this mask, which I'm going to take it off right now. You'll see for those who can see, this is a typical mask, but it has a clear plastic window sewn into it where the mouth is. And Sarah designed this originally to help accommodate someone living with a disability. However, of course, we all benefit if we can see each other's mouths when we're wearing masks, whether we're hard of hearing or whether we're deaf and using sign language which of course the faces a key part of the communication, everyone finds it easier to understand each other when we can see the emotions and the movements that make up more of the face.

It's another example that when we design for the extremes, everyone benefits. Everyone should be wearing a mask with a clear pass tick face so that everyone visual can communicate better. So thank you, Sarah.

Now this principle of designing for the extremes so that everyone benefits is a core of the experience that Shabbir was asking me to comment upon. It's a key principle because, for example, working with the government of Canada, here I am in Ottawa in the morning in the nation's capital of Canada, we were able to drive down the cost of a typical interaction with the National Revenue Agency Service from \$26 a call every time someone picks up the phone during tax reason it costs \$26 to answer the phone. If someone can self-serve, it only costs \$0.06. If we make sure everyone can self-serve, we're actually able to save millions of dollars.

This type of thinking, what we like to call the accessibility dividend when we do things to include everyone, we get benefits for everyone. So when I'm working with governments in Mexico, Norway. Shabbir thank you so much when Internet Society invited me last fall to Pakistan, it was perhaps my biggest opportunity in my career to leave a legacy of designing a better civilization because Pakistan has 200 million people, fifth largest population in the world and perhaps 20% living with some sort of disability. Imagine just those with hearing challenges over 10 million people. So the opportunity, even the changes we were making in the fall to help Pakistan to fulfill its digital plan, even if it helped just 1% of those people,

we are making so many lives greater.

Shabbir, you were mentioning about the challenges of COVID, I completely agree. If anything, there's a silver lining that we're experiencing with COVID-19 because suddenly our clients are saying, now we get it. Now that we have to work remotely, now that we can't always be seen or heard or be able to touch, distance learning, distance events are simply a basket of temporary disabilities. In fact, for my own organization because we're so accustomed to being -- to inclusive communication we actually found the transition very easy to go from everywhere working remote because it's kind of what we do any how.

Now the Canadian government has done a great job. What I'm also finding is that working with people around the world, we're finding people are quickly stumbling, sometimes leaping forward with things they didn't think they could do. For example, in higher ed, in Europe, in Canada, in the United States, around the world we're getting calls helping to figure out how to do distance education. Professors have been said for years, can you put your courses online, can you make them fully accessible? They'll say this will take years ago. But suddenly they had to get it done. Suddenly universities, colleges around the world are online, varying levels of accessibility, but they're getting it done. So people are getting pushed to get this stuff done. Here in the federal government in Canada there's talk of going to digital signatures instead of ink signatures on documents for a long time. Finally people of all abilities suddenly realize that they have to be able to sign documents officially at a distance. Digital signatures also just happen to be accessible.

So this is the payoff. Now there are of course political challenges as well during a situation like this during the pandemic in the United States, for example, there were people suggesting that, oh, it's hard enough to run society in this new way. How can we -- maybe we should just lower the bar. Maybe we should temporarily turn off the regulations to protect the human rights of people living with a disabilities. It's a horrific idea because we know people living with disabilities are more at risk than the general population both from a political perspective where, for example, in the state of Alabama there was direction being given to hospitals to not offer mechanical ventilators to patients who happen to have conditions of retardation or dementia or brain injuries. I understand the logic of how they got that but a horrible way to think that people living with disabilities would be considered less human when it comes to deciding who gets

to live.

The response though, mostly globally that we're aware of, is the opposite. People are realizing here's an opportunity to make sure everyone remains engaged.

We were also talking, one of the nuances we've been dealing with as we talk about return to work strategies is we realize that in the government as people return to work and people need to wear masks, how will we handle challenges of colleagues who are hard of hearing or blind. For example, we realized --

**DAVID BERMAN:** We realize that wayfinding public wayfinding, Braille on the walls is actually a public health issue. Why should someone is blind have to touch something someone else touches. We lead forward with beacons and QR codes and other ways we can help people find their way without having to use the old school techniques. I'm not suggesting for a moment that we would replace the system --

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**DAVID BERMAN:** Rather, we would augment it. We have leading edge thinking with, for instance, I was looking at an Android app, I'm holding up my phone, which allows you to continuously scan the space you're in up to 75 away of any QR codes which will continually announce them to anyone who is nonvisual so they would know the objects in their privy like the QR code on my T-shirt to be available to you in your field of vision.

So the key is this. I'm thinking, imagine you were living through a pandemic but not the current one, but the Spanish flu in the 1910s or imagine we were living in the Bubonic plague which wiped out a third of the population of Europe. We know how horrible the death toll was from these pandemics, but very few people are talking about how especially additionally horrific is was, how devastating it was in those times for people living with disabilities.

Now in this pandemic it's different. As Shabbir was pointing out, we now have the technology to keep everyone connected. In fact, those very technologies that we rely in to stay connected, everything from the telephone to those Android tablets to the cameras we use are all based, the majority of them are based on assistive technologies. They were developed as ways to include people at the periphery and ended up benefitting everyone.

So -- but back in the time of the Spanish flu or the Bubonic plague those technologies didn't exist. Imagine how isolating it was to not even have a telephone to know what's going on or communicate to people if you were self-isolating. However, we get to live in this remarkable time. Now the Internet Society has been fighting the fight to create a stronger Internet that includes everyone for 28 years. And it's no co dozens that in the last three decades more people have been liberated through digital technology than all the wars and revolutions in the history of humanity.

We're living in perhaps the 75th generation of humans. There have been perhaps 7,500 generations. We happen to be living in the first generation where it's truly possible to include everyone. Now here we are with this challenge of living through the first plague, the first pandemic where it's truly possible to keep everyone connected. I'm proud to be part of the Internet Society's move to make sure this happens. And I really believe we will come out of this stronger, more unified and more inclusive than ever but only because of people like us are going to step up. Because we can do it, Shabbir mentioned every technology is available because we can do it. We must for the good of society and for humanity and the good of all. Does that answer your question, Shabbir?

**MUHAMMAD SHABBIR AWAN:** Thank you very much, David. Thank you very much for this very precise crisp and very detailed analysis. I'm sure people will have questions where they will find some time to ask their questions. If they think their question is very pressing and if that attests to a specific speaker, they can post it in the chat and our speakers will try to answer their question. We will ensure it is answered during the question answer session.

We talked about the pandemic. We talked about disability. We talk about the need that no human life is less or more important than anyone else. All humans are equal so that the life of the human beings are equal as well.

David mentioned about the disability training where he kindly sponsored by the Internet Society in Pakistan. I would like Naveed Haq to talk about this training. Naveed Haq, ladies and gentlemen, is the director, regional director of Infrastructure and Connectivity of the Internet Society. He was the main man -- rather, he has been the main man behind a number of projects related to accessibility for persons with disabilities, particularly when it comes to Pakistan and in Asia Pacific as well. Naveed, how have you find this experience of working

with digital accessibility for persons with disabilities, one.

My second question to you is, how would you rate the response by the governments on the accessibility?

**NAVEED HAQ:** Thank you, Shabbir. I hope everyone can hear me. Before I start, I would actually -- since I'm the cohost as well, I'm looking into the chat and there's a question perhaps David, if you can answer it. And then I see someone also have another question for David. So I suggest, Shabbir, if it makes sense to take the questions now. Then, of course, I can take my questions to answer.

So I will quickly read this question which is about affordability part. The question says the biggest block to assistive technologies is money. When 80% of those disabilities are money is -- particularly amongst disabled it is a problem that needs addressing. So can you tell us maybe about our assistive technology very expensive because that's a very valid question.

**MUHAMMAD SHABBIR AWAN:** Yes, before --

**DAVID BERMAN:** I would be happy to answer that right now.

**MUHAMMAD SHABBIR AWAN:** David, would you quickly make a comment and I have a couple sentences to say on that topic as well.

**DAVID BERMAN:** Absolutely. I think the question is from Olaf. I hope I'm pronouncing your name correctly. I'm pleased to make this argument. I welcome you to join me directly at some other time because I get into more examples of going into the economics to make sure that creating a more accessible society. For example, the face mask which I'm holding up to the camera again now, Cynthia, my partner, made it for me this week just using these online instructions that Sarah published. If anyone needs the instructions, email me and I will send them to you. But it's true Olaf historically assistive technologies were very expensive. One of the great breakthroughs because so many assistive technologies have their costs driven down. For example, this Android phone, I have a color deficit. If I wanted to know what color my shirt was I would have to buy \$200 device and hold it against the cloth and tell me what color it is. Now I can get a \$2 app on my Android that does the same thing. This device is called the hip sync this is a device that allows people with a mobility question to navigate websites according to WCAG they can navigate any website using this device. It has a tip to allow the movement of your lips as a mouse and to blow as well to

cause like a mouse click. Now this device, things like this costs \$10,000 ten years ago. This device is printed on a 3D printer with under \$300 worth of parts. It's designed by an NGO here in Canada. So for \$300 someone can have technology -- there are people building them to cover the \$300 part. So using local parts, local labor, this entire magic device can work.

So aside from the payoffs I mentioned with the accessibility dividend. When we put the census online and made it accessible in Canada, it saved millions of dollars of people having to transcribe paper forms in a computer. It was done to save money first and make things accessible second. It's the truth. I have way more examples. If we strategize it we have to do it at the core. If you just think of accessibility as an add on at the end it's way more expensive. If you change the culture and include it in by default, you drive down costs. Over to you, Shabbir.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, David, for this very precise answer. I just have to say after your very detailed answer that costs while making any online event accessible should not be even considered. Should not be even questioned. Whenever is online -- because things and events are different, very, very different in online world rather than the physical world. In the physical world nature takes its course. Whereas the online world is being created, being prepared by us, by human beings. And whatever can be put online, it can be made accessible by any means.

And costs should not be a question. I do understand that there are some certain considerations to societies which are less fortunate than some other societies. But if we start questioning cost, we will be sacrificing much more than the cost we will be saving. This is my word on that. Certain people may disagree with me, but this is my personal opinion. And I stick to this opinion as well.

Naveed, over to you.

**NAVEED HAQ:** Thanks, Shabbir. We got good answers to that. I'll quickly move to Brent because we have another question by you by Brent Manuel. I'm going to unmute your microphone.

**MUHAMMAD SHABBIR AWAN:** Naveed?

**NAVEED HAQ:** Yes, Shabbir.



**MUHAMMAD SHABBIR AWAN:** I think we better not going to this road answering questions in the middle. We can take questions and star off those questions, some will be repeated. I think we can answer these questions in the end.

**NAVEED HAQ:** That's fine.

**MUHAMMAD SHABBIR AWAN:** This way --

**NAVEED HAQ:** Because he said he precisely has a question for David, so I thought I would use David's time. Any how, I understand. Okay. So Brent we'll take your question at the end. Now it's time for me to wear my other hat which is a speaker hat so I'm no longer the cohost.

First of all, thank you so much, everyone. It's good to see we have around 47 participants which is great. We all understand that this is the time when everyone is on the Internet and life is running on the Internet. I also understand a lot of us have these webinars and a lot of online events coming in which is not easy to handle as well.

But to answer what Shabbir asked me, I would say -- I would like to share some points based on the work that we did from Internet Society in Asia Pacific in multiple question countries from the government side I would say unfortunately in many of the developing countries digital divide has been discussed and now with this pandemic digital divide is on the surface. Ten years ago there was so much conversation on this but now we go to the digital inclusion. And now we're back to the digital divide question who are the people who are not connected to Internet, which is life is running on it. The digital divide discussion unfortunately didn't scope in the accessibility factor. They didn't scope in the factor that the person with disabilities are also a user category who can have access to technology and who can use this technologies which actually bridge as a platform to enable the inclusivity in society. That's one factor I observed.

The second one is the infrastructure and the content which was designed primarily at the local level, they were also not designed in a way that they should be accessible or they should be compliance with technology and platform which can make them available for everyone. And these two factors actually have now made this very clear that there is a strong opportunity for the governments especially in this time to see how they can revise their policies in a way that the environment in a digital society is totally inclusive and there is no one who is left

behind.

I also experienced working in Sri Lanka and Pakistan particularly, the developers, those people coding the websites, those people who design those applications, now, again, I'm not talking about global platforms like Facebook or Google, because we know they all are inclusive. They have all of those and anyone can access Google or Facebook. I'm talking about the local solutions because to me the Internet is driven primarily by the local innovations. The Internet is driven by the local infrastructure. So those developers, they have little or no idea about accessibility. The discussions we had doing our work with this community we came to a conclusion that many of them don't know that they can actually design accessible websites.

This was something that was very surprising but alarming as well. So that's also a problem which we see that the nursery where these developers are developed where they learn the coding languages or design the software or the software courses like software engines at the university, they are also have not taken serious consideration that they should teach the students about what is accessibility, how their applications, how their Internet websites or how solutions online can be accessible.

For us, again, societal and the culture factor has been that the person with disabilities largely have been marginalized we have more than 600 million people with disabilities in Asia Pacific. That's a huge number. Most of the work that I have observed in Asia Pacific including Pakistan has more been toward the helping factor, you know. We have not been able to equal a this the business sector. Imagine those few examples that David has shown us. These are products which are cheap. This answers the affordability question as well. If we are able to create an environment where these products can be created locally because there is a lot of innovation in Pakistan at least I can say, why not?

So a lot to be done. I would say this pandemic is an opportunity. Let's see on the positive side that this has realized us as human, as human kind that Internet is something which is -- which can run your life. You can do anything, everything on the Internet. Now everyone is doing everything actually on the Internet. So why not those persons who are hard of hearing or who have a visual impairment or some other types of disabilities? Especially from the emergency response as well.

I was thinking before this webinar, and thinking how I should cover it, I was considering the government websites of Pakistan about the COVID-19 response

which is excellent. Then a question comes to my mind, are those websites accessible? Maybe you can check and tell me because this just came in to my mind. There is a response from the government, but is that response inclusive that the information that is critical especially in this time when everyone relies on Internet, a person who is visually impaired, are they able to read and communicate that information on the government emergency response websites or not?

Again, I would end saying that the work we did in Pakistan made us learn a lot. Lately we did a lot of workshops. We were able to make some policy changes as well. There's a huge improvement to work more in Pakistan and a lot of countries, especially in Southeast Asia. It's a huge population and a huge population of persons with disabilities as well. Let's take it as an opportunity. Webinars like these are kind of messenger or advocators can online advocate -- advocators, yeah, that can help us take steps forward to make an inclusive society using that technology. As we say, the Internet Society, Internet is for everyone.

Back to you, Shabbir.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Naveed, for this enlightening talk. I'm happy that you took the time that you were allotted, five minutes. Thank you very much for being precise and crisp.

Yes, it is very important that governments do their part to make digital environments, digital spaces accessible. But at the same time it's also important that the drivers or the creators or the makers of those spaces, the developers and other civil society organizations they also do their part. It would not just be the part or the responsibility of governments that can make these environments accessible for everyone.

Our next speaker is a lady and she has a very fast experience of working with digital accessibility for persons with disabilities with over 25 years working with that. She is very well known. She needs no introduction. Gunela Astbrink, she is currently member of IGF. She is also the vice-president of Internet Society accessibility special interest group. I know you have experience and much more to share, but what I would like to ask you in this webinar is that how do you feel how person with disabilities and digital spaces are being treated in your part of the world? When I say your part, I mean the Australia and the Asia Pacific.

**GUNELA ASTBRINK:** Thank you very much Naveed. Goodness me. I was listening to Naveed before. Thank you very much, Naveed the introduction. I'm delighted to be part of the webinar. I'm going to speak slowly to give the sign language interpreters a chance to be able to interpret what is being said.

Now, we know with COVID-19 that information and communication has all moved online. And it's more important than ever that all persons with disability has equal access to that information and communication. So we all know about the UN convention on the rights of persons with disability. There are 181 governments that have signed the UN CRPD, as we call it. But are they doing enough? That's where rhetoric isn't meeting reality.

So I'm going to cascade down from the international to the local level and talk a little bit about the Australian experience. For you NCRPD is a key instrument that Australia has signed and ratified. Article 9 refers to ICT accessibility.

Now Australia is a federation of states and territories. It has its own quite strong jurisdictions. One unique thing now with COVID-19 is that borders between quite a few of the states have been closed from each other. And so that is an example on how the states work. So the states have their own disability legislation. I live in the state of New South Wales in Australia. There is a disability inclusion act. All New South Wales government departments and government agencies and all local government councils are required to produce disability inclusion action plans.

So this is where we're talking about policy. Is it really meeting the reality? So I will use a case study close to home in a small local government area of 35,000 people called Byronshire to illustrate how in this area it's working well. It doesn't mean it's working well in other areas.

Now, the Byronshire has its own plan with ongoing input from the access consultive working group comprising of people of persons with disabilities from a local community. I'm one of those. So in fact the working group has advocated for many accessibility measures including making the council website accessible because this is where the community gets information about what's happening locally.

I'm happy to say that the website is more or less accessible, but it needs constant monitoring. Fortunately the council when they hire a new web developer, that web developer needs to be familiar with WCAG 2.1 as in the web content guidelines version 2.1. Verbally accessible on deny document

management is being developed by a web developer in the council. So that when new documents come online, they are accessible from the start. Rather than having to be retrofitted which is often the problem.

So how have some of these accessibility measures been achieved? Well, council section leaders get direct advice from persons with disabilities at working group meetings. Some includes setting up an internal staff access group to embed accessibility in everyday work. This is lead by a staff accessibility champion. Online awareness training on disability is being introduced. So all of this factors together make a difference.

The council is putting in place a more inclusive employment practice incorporating processes that welcome applications from persons with disability. And obviously getting a job is a key part of social inclusion and certainly accessibility to the digital workplace is vital.

So the sense is that if more persons with disabilities are part of the workforce, its broad understanding can develop about persons with disabilities and (?) and this type of approach, which I just outlined can be done in many, many organizations. Some of this is being discussed with the Internet Society.

Now in Australia there's a saying from little things big things grow. And it's usually a symbol like this these used. If the approach can work in one small community, it can be replicated in many other local, regional, and national governments. The right ingredients need to be in place. That's policy, practice, and people. This is where rhetoric meets policy. How does digital accessibility come down to this?

Well, people. So using policies and legislative instruments is one thing. We need them. But it has to be more than ticking boxes. Once people understand why digital accessibility's important through direct contact with persons with disabilities there's a greater incentive to make a change. For example, if a content development team included a blind person who uses screen reading software and speech output, they wouldn't forget to include, for example, an Alt text in a description of an image on a website. So I'll just finish off quickly by saying, okay, what needs to be done?

We need to ensure that policy is put into practice. We need more disability awareness training. An example in Australia is that the federal government developed a contact tracing app called COVID safe. And while the government had to be reminded of its accessibility obligations, they followed through. But that

app does not work on all the phones. And many persons with disabilities can't afford the newer phones, so it might not be usable by all persons with disabilities.

Now our disability voice must be heard and respected. And that's ongoing. New issues arise and have to be dealt with.

Finally, it comes back to understanding why digital accessibility is vitally important to everyone during these times of COVID-19. Thanks.

**MUHAMMAD SHABBIR AWAN:** Thank you, very much Gunela for this very knowledgeable intervention. I do apologize for speaking very fast. I understand that I've been speaking a bit fast. I'll try to speak a bit slow.

So before we move forward to our next speaker and ask them our question, I would like to ask our technical expert, Joly, that we had a small poll for the participants about the accessibility of this event. As the president of Accessibility SIG would like to have this disclaimer that no one event is perfect, and we do understand that there would be certain mistakes. So we would like you as a participant to give us the feedback so that we can make our upcoming events more accessible and more inclusive for everyone.

Joly, do we have that poll? Can we put those questions to our participants so that we can have some answers?

**JOLY MACFIE:** I don't have it in hand. Give me a few minutes, Muhammad.

**MUHAMMAD SHABBIR AWAN:** Okay. Meanwhile, you collect those questions, I would ask our next speaker which is Fernando Botelho from Brazil. Fernando is visually impaired. I would like to -- and he's associated with F123 Initiative in Brazil. I would like to ask Fernando as a visually impaired how you have found the accessibility for persons with disabilities in your part of the world? How governments deal with the accessibility and how civil society deals with it. What is your experience? I would like you to share some of your personal experience if you can.

**FERNANDO BOTELHO:** Sure. Thank you very much for the chance to be here. I can definitely share a little bit with you. As some of you know, I am based in Brazil and I've been involved in assistive technology in a very direct way for 12 to 13 years but even before that just because I am blind.

So in Brazil we have a situation that I think happens in a lot of other places in a lot of other countries from what I have observed which is we have absolutely

remarkable and amazing laws that do not get implemented in quite such an effective manner.

So our country signs the UN convention on the rights of persons with disabilities. We have been exemplary in many aspects of legislation. However, if we look at my experience as a blind person, if we look at the experience of the people I know, friends and so forth, with he look at reports from international agencies, if we look at W3C reports, and if you look at surveys, which I did throughout the project that we call F123, we realize that there's still a lot of problems in web accessibility in Brazil. And that includes every sector of society, specifically or most importantly, I should say, it includes government websites and educational websites, and it includes e-commerce.

So as previous speakers have said, it's really a consequence of policy that sometimes is not converted into practice. And that is often -- then ineffectively because of the lack of involvement of people. So that's a wonderful triangle of requirements that Gunela helped -- shared with us. But I think it's more than that.

I think when you see these difficulties, they really tell you a lot more about the priorities of any particular society than they do about the technical challenges that they symbolize. Because technically, yes, there are a few challenges that are a little more substantial than others. But in general, the main problem we faces not a technical one. It's one of priority.

When society is strongly against behavior, it puts people in jail for it. If society is against a behavior but it's not quite as serious, it fines them. They get to pay fines for the infraction that they committed. I'm talking either individuals or businesses, of course.

And then when the society thinks something is nice but not a requirement, then it just suggests that they do this or that. It does not fine them. So the approach that has been adopted by a lot of activists in Brazil is that we should educate. And I absolutely agree with that. I strongly support that. However, this is a required -- this is a requirement, but it's not sufficient.

If you do not fine people for infractions, they will keep on doing them. And, yes, we can certainly argue that we can educate people more. And let me mention a few of the suggestions. For example, people should have accessibility included in curricula in University and all kinds of courses involving content, involving technology, and that's absolutely wonderful. I think they should. And people are calling for that here in Brazil. They should have this as criteria when

they need to approve a budget for a government event or otherwise, there should be accessibility in that budget. That should be a requirement. I agree with that.

But is it sufficient? How many years are we going to focus exclusively on educating and not have any fines for infractions?

So that's what I call, you know, charity. If you're supposed to do something or you should do something, but there's no hard requirement behind it, if it's voluntary, that's charity. If it's really a right, there should be some enforcement of that right. Because if it's a right, it's important. If it's important, society should require it in a firm manner.

So I think we either have to stop calling accessibility a right, or we should start treating it as a right. So I think that's basically what I have to say. I think there have been advances in the last decade. We can certainly point to improvements in government websites, for example. But there's still a lot to do. It's not still not working for most people in most websites. This is not just entertainment websites or just social media where you're chatting with friends. I'm talking about University access, distance learning. I'm talking about accessing important government documents which you might need. So these are not secondary needs. These are very much at the core of people's rights.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Fernando, for this enlightening talk. I do understand that there are some difficulties in ASL language interpreter as it has been mentioned in the chat that this is a learning experience for us, and we were thankful for the participants to highlight this issue for us. It was a challenge for us to organize sign language interpretation. But we apologize undoubtedly for this inconvenience.

Judy Okite is one of our speakers. She is from Kenya. And she is the founder of the Association of Accessibility and Equality. Judy, there has been a question in the beginning I would also like you in addition to talking about accessibility for persons with disabilities in your region, I would also like you to give your views on the devices and accessibility versus cost. So over to you. Judy?

**JUDY OKITE:** Hello.

**MUHAMMAD SHABBIR AWAN:** Yes.

**JUDY OKITE:** Thank you very much. Hi, Fernando. So good to see you.



**FERNANDO BOTELHO:** Hello.

**JUDY OKITE:** Hello, everyone. And thank you, Shabbir, and your entire team for allowing me to be a part of this webinar. Indeed listening to the previous speakers, with experiences across the board. I really love what Fernando had said. It's either we make accessibility for persons with disabilities a right or not. Of course that's where I wanted to begin with my discussion today.

It's unfortunate that you find in Africa that the persons with disabilities do not understand this right. And so when they get something done, it's almost like a favor. And so where we are coming from or I am coming from, we are starting with persons with disabilities to engage them, to educate them about their right about what they must have and do not what they need to request for because as we talk about accessibility, it simply means that everything that every other person is able to access should also apply to them.

Of course we have talked about the UN CRPD, Africa as a continent as also have signed with only six countries which have not signed to the convention. And we should be able to see much difference as we are right now.

Last week the UN had a study. And it showed that 48% of the African continent countries have standards or guidelines regarding accessibility. Now the things that are happening in Africa or rather globally that being able to get this information is very difficult. So either there is no implementation or either if there is implementation, then it is not being shared of the then it's not being discussed. Because to come across this information is becoming a bit of a --

So I will talk a little bit about what's happening in Kenya. We have ICT law 2019 that has a whole paragraph, actually, concerning accessibility. To be able to pick out some of the key issues that it talks about is that one of them is promote the design, production, and distribution of accessible ICT at an -- now unfortunately when we talk about accessibility or rather at my place of work, when we view our audience on accessibility, then just like Fernando said, the web developers do not have accessibility in mind simply because they will say this was not part of their curricula.

So you're telling us something new that we're supposed to be having. You find that the ICT website in itself is not accessible for persons with disabilities. The national counsel for persons with disabilities organization that defends the persons with disability rights, the website in itself is not accessible. In short, what

we have on paper and what we are having in implementation are two totally different things.

When it comes to regarding what has been happening during the COVID-19, Kenya had the first case in March. And of course there is a day-to-day updates from the Ministry of Health. So of course the first days accessibility was not considered until we had to make some noise. And then after that, they would have a sign language interpreter, but since they have to be 1.5 meters apart, then it wasn't making sense because of course the camera is going to zoom in to the speaker at the moment. But over time they have improved. So now it is up to the broadcasting house to ensure that when there is a live broadcast, there is interpretation. There is the sign interpretation. So that we are grateful for.

But what remains across the board is what is on paper and what is being implemented? It leaves a lot to be talked about.

So my thoughts at the moment would be how do we achieve this is really a political reel because many of the things unless the legislature is part of it buy into it and stop playing around with the lives of the persons with disability as a red cat the back of the -- when we're about to have an election, then they will make these things accessible. But once that is done, then we go back to where we are.

So political wheel and also regulatory good will, that the regulator will know what it is that they're supposed to do and do it exclusively beginning with the government itself because it's -- already has it that persons with disability must have information in accessible formation either in Braille or in sign language and the content online must also be accessible.

Just to answer what you asked about the costs, yes, disability has costs. When it comes to the costs of the devices, assistive devices, of course it's pretty high compared to when a person with no disability does not have to have said costs.

For example, if you have to install JAWS on your computer, it will cost you. Whereas, the person who doesn't have a disability really need JAWS on their computer. So I hope I've answered you, Shabbir.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Judy. You have highlighted some of the very key points that we wanted to discuss particularly with regards to very unfortunate incidents where ICT websites and the very websites which are

supposed to provide information to persons with disabilities are not being accessibility.

In the favor of time I would go to my new speaker, Peter Crosbie is from France. He is advocate for the autistic community. And he's very passionate when it comes to the rights for the person with cognitive disabilities. This, ladies and gentlemen, is an area when it comes to digital rights and digital accessibility, I'm not sure if Peter will you be able to kindly ponder on this question as well, that it seems that cognitive accessibility and disability is an area which is often neglected from the discourse. So would you elaborate on that question, correct me if I'm wrong, if my perception is right or wrong. And also tell us something about cognitive disabilities and how it is being tackled in France and Europe.

**PETER CROSBIE:** Thanks Shabbir. I just want to check. So Shabbir summed me up. So I can move on. So I'll start with a personal observation. And it's this. In terms of accessibility this Zoom call is about the limit of what I can cope with. In fact, I can only cope by turning the screen off and having what I want to say written out. Otherwise, it's just all too overwhelming and stressful for me. But not just for me.

What we're doing now here would be inaccessible for many people with cognitive disabilities, at least without help. And it's the same for people with limited digital skills. And it seems to me that at some point we need to have a discussion about what's going on here. Because these new technologies are really reinforcing a digital divide and creating a kind of digital underclass. And in a post-COVID world, to be honest, I can only see it getting worse.

One of the reasons I see it getting worse for people like me is because there's just very little understanding of what cognitive access is or how it works. As an example, if we just stay with Zoom, they trumpet they work with disability. Great. That's fantastic obviously. Here's what they have to say, or one of the things, the accessibility team works to ensure that all releases are compatible with as many assistive technologies as possible. Assistive technologies, fantastic. But there's no mention anywhere on the Zoom site of what specific cognitive access measures they've incorporated. And it's not just Zoom. Pick a domain, employment, housing, health, education, personal finance. In every one of these people are increasingly having to rely on ICT. And in every one of them they're coming up against cognitive access barriers.

While this hits people with cognitive disabilities the hardest, it's not limited

to just us. Everyone who face these barriers they're probably without realizing it they call it poor cognitive access, bad design. And it affects everyone regardless of, for example, level of education.

On my website, I'll put a thing in the chat in a minute, I have a link to an article entitled an interaction designer tries to make a bank transfer. It took her ten days and even then it didn't work. The author of that article doesn't have a cognitive disability, but she does have a PhD. My site also includes this quote, the needs of the largest disability group in our community, those with cognitive disabilities and learning difficulties, appear to have slipped through the cracks when it comes to website accessibility. We're failing too many people because cognitive access is and remains a largely unaddressed issue.

Now, that's the case everywhere and it's also the case here in France. As you know, of course, France is in the European Union so we're covered by the 2016EU web accessibility directive. This requires public and government websites to be WCAG compliant by September this year. It's similar to, for example, Section 508 in the US. Everyone can imagine what I'm talking about.

However, in France for a whole lot of reasons that are cultural, societal and even linguistic when it comes to disability and access we lag behind, certainly behind the English speaking world. For example, the American ADA act dates from 1990. The French equivalent only came into force in 2005. Disability and everything that stems from it is something that France struggles with. For example, the social -- of disability is even rejected in some quarters. There's no field of disability studies in France. Because of that, the development of a discourse and language around disability is largely absent. The cherry on the cake here is that in French there's not even a word for disability.

Needless to say, this has a real impact on digital accessibility. So while we have the laws, it's often fairly hit and miss and access barriers are common. This reflects what Judy was saying. In short, as with cognitive access we still have a long way to go. Thank you.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Peter, for these very enlightening points. I do agree with you that these technologies where they provide us opportunity, they pose quite a number of challenges as well. And the purpose of discussions like this is to find the way out of those challenges.

My next speaker is Lidia Best. She is the former vice-president of the

European Federation of Hard of Hearing. She is based in UK. Lidia coming from UK a developed country and having experience with working with hard of hearing, how do you see -- I do understand that on this call on this webinar there have been certain challenges, but how do you see these challenges being raised by the communities outside this webinar? Over to you, Lidia.

**LIDIA BEST:** Thank you very much, Shabbir. Thank you for inviting me to speak today. It is a great pleasure. And also thank you for Peter for giving a great introduction because the some of the things he spoke about relate also to people with hearing loss. How do I find this webinar? For myself, I'm very well. I'm using StreamText because using the closed caption option in the Zoom, when everybody is else bringing up some chat messages, it overlaps. So it's better to ignore closed captioning in the Zoom. For me, it's better to watch on the separate device. But this is exactly the problem not everybody can have a separate device, for example.

I also from Poland. I was born in Poland. And I'm living half of my life in UK. I see big differences between what disability is like for me in UK and what accessibility is like in Poland. And what I have been observing and watching was, for example, looking at a digital divide, who is right now hit probably the hardest when we're looking at COVID-19? I think it's older people, we're the ones we're supposed to shield, we're supposed -- who are most endangered you say by the virus. And yet the accessibility for them is not really what one would think of.

For example, if you think about emergency responses by our governments in all different countries, they mostly relate on telephone calls. So you can call them. You can find more information or they relate to just sending you to the website. Well, great. Those websites have chat facilities, then perhaps yes. That's going to be accessible to a person with hard of hearing. Those need interpretation for those using sign language. When you come to think about people who are older, I'm in an association of different people which has different members of older age. Many of them are not feeling comfortable with new technologies even having smart phones. You will not be using for example, with some countries including UK has in telecoms they're used to use something that is more familiar to them. For example, USA is far ahead. Thank you very much in terms of the telecom access to persons who are deaf or hard of hearing. They have a range of accessible ways of being contacted and being able to contact services.

This is something that needs to be brought into the UK as well as Europe. It's one of the most important points I think in the opinion of David today when he said COVID has got a bit of silver lining in what it has done. It pushed some of the conversation a little bit further than before.

So for those who have a hearing loss, the whole discussion about masks, for example, has broke out with communication issues suddenly in the forefront where previously we struggled sometimes to get the message across. Right now this message is going very well across. I think it's something I never expected to happen actually. This is really a good thing to do.

Now one more thing I wanted to say is something I've heard previous speakers saying about costs, for example. So costs of accessibility. So in the UK we have an act which is pretty good if you think legislation, but it's not always strong enough.

So what we see -- and I think it's part of the UNCRPD when you read it through, there is discussion about reasonable adjustment. Who decide what is reasonable. Who decides if my request is reasonable or not. And that decision is not really in our persons with disabilities domain. It's often in the domain in the people who organize events and so on. What I have noticed recently organizations which previously would have funds to make events accessible but they can't make webinars accessible. They have no funds. How can I request that they're providing captioning when they say to me we have no funds? I think that's something serious going on while legislation is happening in different countries, there has to be a financial mechanism which allows persons with disabilities to participate fully.

What kind of mechanism -- in UK if you are working. But if you're not working or if you are working on voluntary basis with a charity, for example, you will not be able to access any funds to allow you to actually bring your own, say, interpreter or captioner to support events. This is possible not fully -- not so easily, but still it's possible in different countries something we cannot do in UK. There are a lot of different discrepancies going on.

What I think also we need to look at artificial accessibility across Europe where in UK we have had some issues by government for example, briefings. We do have them. Also we have live captioning. Across Europe and I've done a recent report for international communication union meeting last week, what I have found there are countries where hard of hearing people or deaf do not use sign

languages have no access to information to television briefings because there are no live captions.

And also there is no -- programs with captions. There is an issue for people who use get sign language interpretation. Yet the interpreter size on the screen is unusable. We cannot even follow this because they cannot see the interpreter properly. So there are lots of issues going on which COVID in some ways have integrated and energized our community to really get our message across but we are not being included all too often.

Now, Shabbir, coming back to your question about how do I find event in general is I don't use sign language. So for me it's difficult for me to say if the interpreter for example for this meeting is very good or is not very good, but the colleagues who have come up who are actually using sign language ASL have been able to confirm they don't feel is adequate. Therefore I think we need to work together to make sure the next time we can do better. It's all learning experience. I'm sure we can make things much better for everyone. Thank you.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Lidia, for this very enlightening talk. Unfortunately we are about to run out of our time. Joly and captioners, can we go a little bit beyond our time?

**JOLY MACFIE:** I don't mind if the captioner has to drop, she can drop. Otherwise, she can charge us over time.

**MUHAMMAD SHABBIR AWAN:** Can I ask captioners to say -- it's 6:23 until 6:45?

**CART PROVIDER:** I can go 15 minutes. But not much more.

**JOLY MACFIE:** Muhammad.

(Overlapping Speakers).

**MUHAMMAD SHABBIR AWAN:** I will exercise the moderator's right and I will ask the participants to pose questions in the chat and if you have questions specifically from a specific speaker, please do address them while our last speaker speaks so that your questions can be answered. I'm really sorry about that we will not be able to hear your good voices, very beautiful voices. But in for time we have to change our mode a bit.

Without further ado, I would like to ask Manique Gunaratne. He is from Sri Lanka. He is visually impaired and manager of Specialized Training and Disability

Resource Centre Manique, as a person with visual impairment coming from a developing country, how do you feel about digital accessibility rights and how do you feel that your rights are being secured in your country and beyond?

**MANIQUE GUNARATNE:** Yes. Good evening to everyone. Can you hear me?

**NAVEED HAQ:** Yes, Manique.

**MANIQUE GUNARATNE:** All right. Thank you for inviting me for this webinar. As I told you, thank you for including actual persons with disabilities because we always say nothing is us without us. How about digital rights has been secured?

The problems, the list is very long. So what I must say that most of our digital rights, rights of persons with disabilities in digital accessibility, you know we are facing a lot of challenges. Rather than talking about challenges what I say we must do and get together to that persons with disabilities will be included so that the Internet, the concept Internet for all will be a reality.

So in Sri Lanka we have problems in digital accessibility. In Sri Lanka we don't have -- specific body to address these issues of digital accessibility. We have them in digital infrastructure and we have information technical information and communication technology agency where they do have services for digital accessibility. But when it comes to digital accessibility for people with disabilities, the issues that we have are not addressed. Why these are not addressed? Because no systematic mechanism to include people with disabilities in the decision making process starting from policy to downwards.

People with disabilities are not included in the decision making body and also in the committees where they decide accessibility for people with disabilities. This is important because they say nothing with us without us. Also websites most of the government websites are not accessible since they have two languages. They don't use the funds and most of them they don't use the W3C guidelines with regard to disabilities. This is very important.

Also, when it comes when we say Internet for all because during this COVID-19 a lot of university students, school children, and people who are working, especially people with disabilities, they had to work from home, so these people with disabilities sometimes they didn't have the knowledge of using the latest technologies. They didn't have how to, you know, the online facilities especially the coverage of Internet is very limited in Sri Lanka. So for years ago



from organization the Specialized Training and Disability Resource Centre we train people with disabilities on digital access, IT, so that, you know, it's easy for them to work equally as people with disabilities in an organization in the society so that they will be included in the society. So I think these trainings were useful in this situation because they are new to the technology, they are new to the IT skills to work from home to communicate with the learning facilities.

Through some organizations and the very basic there are training programs and programs conducted to make it accessible. We also do give recommendations for web designers. We do access audits so that web designers are trained in digital accessibilities or when they develop websites, they will consider on accessibility. Also in Sri Lanka there are many people in the grass root level. They don't have technology. And also the knowledge on how to use this technology and how to use the Internet and get the information they require.

So through the Internet Society Sri Lanka chapters we have trained several people with disabilities on how to go on the Internet. People with disabilities they need this information and the knowledge how to access websites, how do -- especially they are useful in this situation because everyone is working from home or other situation.

Also I must talk a little bit about women with disabilities because they are the most marginalized groups, and sometimes women with disabilities do need educational training and vocational training and due to poverty they are not included in most of the programs for the society. In a small way we're trying to develop some apps to give information for women with disabilities. Women specific issues information for them to get the information otherwise it's difficult when they don't have anybody to get the information and they don't have accessibility. These are very important and also everyone talked about accessibility to websites to be accessible. The list is long. Since we are running out of time, I will not give all those details.

I think websites should be accessible, not only for screen readers sometimes. You think of vision impaired only use screen readers. There are low vision people using large font, audio, sign language, and simple text for people with learning disability. There are so many guidelines to make the websites accessible. I will not list them now.

So it's proper mechanism should be there to implement digital accessibility because we as organizations working for people with disabilities and the civil

society, it's limited what we can do. This should come from the very top level, policy level, include people with disabilities in the decision making process so that we can tell what are the best sort of things to make it accessible.

I think if everyone get together, we can make digital accessibility with technology so that the concept of Internet for all will be a reality to make the right for all people with disabilities in digital access. Thank you.

**MUHAMMAD SHABBIR AWAN:** Thank you very much, Manique for your valuable insights. Judith, do we have any questions for any of the speakers?

**JUDITH HELLERSTEIN:** If you could put your chat question in the chat, we don't really have time -- unless there are very quick interventions. I know we had Kay and we have another hand up too. So Joly, Ellis has a question or comment. Cost is not the same for every organization. For a nonprofit one it's simply a cost. And the restricted funds make it difficult to provide access services. For commercial organizations it is difficult to advance to show potential profits from accessibility. Research from the likes of Ascentia are demonstrating these profits are real for governments and public bodies exclusion costs more than inclusion. If a person with disability is not included in society, particularly employment, they are not paying tax and must be paid welfare support. Once employed, the opposite is true. The savings are real and immediate. Thank you, Jerry, for this great comment.

I Rhonda has her hand up, is it possible you can put it in the chat?

**MUHAMMAD SHABBIR AWAN:** Could you be very quick, Ronda if you have questions or comments?

**JUDITH HELLERSTEIN:** K. Has had their hand up for at least 30, 40 minutes.

**MUHAMMAD SHABBIR AWAN:** So Judith, I'll give it to you, who you give the mic to first.

**JUDITH HELLERSTEIN:** I'll give it to K. It has to be really quick.

**JOLY MACFIE:** Did you unmute him, Judith?

**JUDITH HELLERSTEIN:** It's not letting me do it.

**JOLY MACFIE:** I clicked it. That means he's got a thing open saying you've asked to unmute yourself.

**JUDITH HELLERSTEIN:** Okay. Meanwhile, Ronda put a question in the chat. She says I am the new Internet Society's global head of training and e-learning. I'm just wondering for all speakers if you could share some of the things that can be done to help training content more accessible for you online. Thank you, Ronda, for that issue. We have a lot of suggestions. The I know Shabbir has a ton of suggestions and others probably do.

**JOLY MACFIE:** That's probably a whole other call.

**JUDITH HELLERSTEIN:** Exactly. We will table that. And we will make that another call. Because that is a lot -- we have a lot to say on that issue. Brent asked a question early on. Let me get to it. Hold on.

**MUHAMMAD SHABBIR AWAN:** Naveed, are you online?

**NAVEED HAQ:** I am here.

**MUHAMMAD SHABBIR AWAN:** You had a question for David and I'm sorry I had to cut you short, but you can see we are running against time. So if you still have that question, you can pose that to David.

**NAVEED HAQ:** So the question was actually someone wanted to ask a question. And I thought the person perhaps would like to speak about it, but then we went with the flow. So I'm trying to read the text. I couldn't see any --

**JUDITH HELLERSTEIN:** Yeah.

**DAVID BERMAN:** It was early on.

**JUDITH HELLERSTEIN:** Olaf posted a comment on it. It said the biggest block for the assistive technologies is money. One considers 80% of those are disabled are living in countries wither money is a rare commodity particularly with people with disabilities. It's a problem that needs addressing.

**MUHAMMAD SHABBIR AWAN:** This was answered by David.

**DAVID BERMAN:** Yeah. There was another question from Mamoona, I believe. No.

**JUDITH HELLERSTEIN:** I'm looking.

**JOLY MACFIE:** While everybody's looking I'm going to share results on the poll. I hit share results. I don't know if anybody can see them.

**JUDITH HELLERSTEIN:** We can not see them. Here we are. Okay.

**MUHAMMAD SHABBIR AWAN:** Joly for visually impaired the Zoom results are not accessible.

**JUDITH HELLERSTEIN:** I will read them. Okay. So the first question if you are a person with disability, which impairment do you have? We have a majority of 40% said they were hard of hearing and 60% said they had a physical impairment. As to the question of which accessibility feature would you like to see in the future, 80% said text transcription, which is good only 20% say sign language. We will try to do much better with sign language next time. It's kind of difficult in the US when all Universities are closed. It's difficult to call people and get them. I would like to thank the organizers for this wonderful webinar. Next time he would like to talk about the Indian experience. Yes, we would love to have you on next time. And maybe we'll have you when we do the format for the Australian and Asian areas.

So that's a good idea. We'll be saving the chat on this. That way we can come back and address any of these questions.

**NAVEED HAQ:** Shabbir, there are comments. People are appreciating. But, yes, I also had to scan through all of the chat. I don't see any questions. So back to you.

**JUDITH HELLERSTEIN:** Yes. Thanks for this webinar. And we are sorry the sign language interpreters were poor. We will do much better next time.

**MUHAMMAD SHABBIR AWAN:** Thank you, everyone. Do we have any hand raise, Judith, we still have five minutes. We can address a couple of people, I guess.

**JUDITH HELLERSTEIN:** No.

**JOLY MACFIE:** Concluding remarks, Shabbir.

**JUDITH HELLERSTEIN:** We can go to concluding remarks, Shabbir. We can talk about the future -- Shabbir, talk about our future lists and what we're a going to do in the future with the webinars.

**MUHAMMAD SHABBIR AWAN:** Yes. Thank you very much, everyone, for joining us today in this webinar in this very enlightening talk. Frankly speaking, we have been been working with accessibility and persons with disabilities for a long time. I had a lot of things to learn from this webinar. I also had to thank my speakers

who very diligently and very openly talked about their issues when they were coming on their turn. Some of them took a little bit more time. But it happens. I do understand that five minutes was very less to put across your point. But thank you very much anyways for coming online and speaking to our audience.

I also have to thank the participants for participating in this webinar and enlightening us about your questions, particularly about the inaccessibilities of this webinar. Thank you thanks also to the captioners, to the sign language interpreters. We will do our best to make our next event accessible. This is actually a series of webinars, about six or seven webinars, six to be coming up in the next five or six months.

We will have first -- we will first have a couple of seminars addressing the needs of -- you have seen that addressing the needs and requirements of every person with disability and bringing people from different regions in this webinar was very taxing, and it took a lot of time as well. So what we will do for the next time is that we will address each disability in different webinars.

For instance, we will have next webinar on accessibility for people with visual impairment. Then we will have a webinar on accessibility for people with hard hearing and as Peter highlighted then with cognitive disabilities. Because we need to find a balance, create a balance between the needs and requirements of different people with disabilities and making truly inclusive and digital environment.

So this is our aim to find a balance, how we can find balance between different technologies, how we can find balance between different abilities and different requirements. Also, how we can find balance between different people with disabilities, for instance, people with hard of hearing and deaf would like to see captioning and sign language on the screen whereas it would be difficult or taxing for people with cognitive disabilities.

So we also need to find a balance in between where the accessibility technologies come across one another. So how do we create a balance among these technologies? So these are some of the challenges that we would address in the next webinars.

We are also planning to hold a webinar for ISOC staff. I do understand there were some questions from ISOC staff as well how we can make e-learning platforms accessible. This is one of the subjects that I personally have raised for a very long time since 2015 when I joined the Internet Society. So it's a blessing.

Also, it's a welcoming step that ISOC itself is coming to us and asking questions about making the e-learning platforms and e-learning content of ISOC accessible for persons with disabilities. So definitely we would do these webinars on these different subjects. And we will try to address the questions.

And if you have any suggestions for different webinars, all speakers, how we can make our future events accessible for persons with disabilities. Do write to us at [info@accessibility6.org](mailto:info@accessibility6.org). If you are not a member of Accessibility SIG, you can become a member and join us in our cause to make Internet accessible and inclusive for all.

Ladies and gentlemen, with this I thank you all for joining us today. I thank all of my technical team, all of ISOC staff who have helped us organize this webinar, our captioners, our sign language interpreters, my co-moderators. Thank you very much.