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(Message from Andrea Saks).

>>ANDREA SAKS: Sorry I cannot be there but I am sure it will be a fabulous workshop and I will be following with the captioning. I am not feeling well today.

None of you want to catch this!

(Standing by)

(Message from Andrea Saks).

>>ANDREA SAKS: I am in the chat box in StreamText captioning in case anyone needs me. Thank you.

(Standing by)

>>BILL PECHEY: Good morning, everyone, and welcome to this workshop. It's good to see so many people here. Just one little item of housekeeping to start with. There will be more later. I must impress on you how important it is to use the

microphones. Because we have remote speech-to-text interpretation as you can see coming on the screen. So if you don't use the microphone, she won't hear you and your comments will not appear. So you must use the microphones.

With me on the podium here I have Yushi Naito who is the Chairman of Study Group 16. And he's going to give a brief welcoming speech.

>>YUSHI NAITO: Thank you, Bill. Good morning, everyone. I would like to welcome everyone to this workshop in the ITU-T for this important event. Today we have a full and varied program covering a broad area. As more countries identify the UN Convention on the Rights of Persons with Disabilities and start to implement it, we will see an increasing need for guidance and the ITU-T is ideally placed to provide it. We have a long history of work on accessibility, intercommunication and the topics is one of the highest priorities in the ITU-T today. The main objectives -- objective of this workshop is to discover areas where we need to do more work. The second objective is to encourage more people to take part in. I hope we can make progress on both of these objectives.

Your input should be essential to reflect accessibility issues in ITU-T recommendations. I can see Study Group 16 working party chairs and key players here on the floor. But unfortunately some of our colleagues cannot attend because they have also their other works. Because we are having Study Group 16 meeting in parallel.

However, the result of the conference will be presented at the closing plenary of Study Group 16 this Friday. And will be reflected in our future works.

I know that some of your -- you have traveled a very long distance to be here. And I hope you will be -- find it useful. Stimulating and enjoyable.

I will now hand back to Bill. And you can make progress with your objectives. And I believe it should be a fruitful meeting. Thank you.

>>BILL PECHEY: Thank you, Yushi, I hope we can live up to your expectations.

So as you can see, there are various interpretation mechanisms out here. I would just like to check that everyone

is happy with the communication so far that they have. Anyone in the wrong place? If you are, then please take this opportunity to move around. Everyone seems to be okay. Good. That's excellent. Often it's very difficult to get these things right.

Something else to tell you is that on the second floor of this building, it's a double high -- there are flights of stairs or one stage on the left there is an exhibition. There are a small number of stands there. But I understand that it will be very interesting. Some information about relay services and other mechanisms. So please take the opportunity to go and visit the exhibition during coffee breaks, during lunch break or whatever.

There is a water machine just outside this room. So if you're thirsty, get yourself a glass of water. And don't worry about leaving the room at any point and coming back. We don't mind. It's perfectly okay to do that sort of thing. There are coffee machines on the ground floor here and there's also coffee available in the restaurant, the ITU restaurant which is along the corridor that you will find that direction. To my right there's a corridor just down there on the right there's a place where you can get coffee, lunch, anything you would like.

As you may have seen from the program, you have two chairmen today, one is me, my name is Bill Pechey. I will be the Rapporteur for Question 26 as we call it in Study Group 16. And we deal accessibility matters across ITU-T. Also with me is Floris Van Nes to my right. And Floris is the capture of Question 4, Study Group 2. And they deal with human factors.

I thought I would just give you a brief introduction to what we're doing in Question 26 and then I'll ask Floris to give us some information about Question 4. And then we can get on with the main business.

In Question 26 as I said our responsibility is accessibility. Particularly in the area of multimedia standardization, which is what Study Group 16 deals with. We have various standards that we worked on in the past. This group was responsible for creating the VAT textphone largely through Gunnar Hellstrom's work. He is here today to help us. He was the previous Rapporteur for this question.

We have a standard Recommendation 790 which deals with

accessibility of terminals and systems. And it's being used in several places. We have a presentation about that later today. At the moment we're starting work -- we have started work on standardization of relay services. We think this is quite important.

The reasons for that would become clear as we go through.

So let me hand you over to Floris to tell you something about Question 4.

>>FLORIS VAN NES: Thank you, Bill. So as Bill said Question 4 of Study Group 2 deals with human factors. The principles of this it for Study Group 2. But it's also as you heard about accessibility you can say it would be across ITU-T. The problem with human factors is that in many cases people think that it is very clear how to use all sorts of technical systems and pieces of hardware or software. Because they make them or they have a lot of education in that field.

And it turns out that even if you tell those people that this doesn't hold for everybody, not for intelligent experts on the subject not knowledgeable people you cannot handle this easily you need experts for that that have the training in human factors to make these things more accessible.

Well that's what we try to do. There's a famous story about a Japanese professor that I would like to give you to show you what I mean. He has his students stand in a circle. They all take their mobiles, their cell phones, mobile phones and then he makes them pass them around so they get the mobile phone of their neighbor which is of course strange to them and then he asks them to dial a number with them and they take quite a while before they can do it. So even these students that are very good in that and although mobile phones are supposed to be more or less the same and are supposed to be useful, you see immediately the problem with that. Thank you.

>>BILL PECHEY: Thank you, Floris. So the next item on the agenda is me giving an introduction to the United Nations Convention which is really what's driving this meeting today. So if we could have the first slide.

Yes, the UN Convention is very important to the work of the ITU and accessibility. And other fields, too. As you can see from the slide it was adopted in December of 2006. And it gives rights to disabled people across the world. Many

different areas of their lives.

You can find the text at the URL there. And I would encourage anyone who has never read it to download it and take a look. It's not difficult to understand the language. It's very easy. And it's a very important document.

At the moment when I last looked, there were 143 countries that ratified it -- I'm sorry; I beg your pardon. There are 71 that have ratified it. And 143 have signed it.

When it's ratified it means that the country is bound by its terms. And that is very important to what we're doing here.

So let's see some of the terms. So if we go to the next slide, please. Article 4 is general obligations. Or governments. The rights of disabled people. And there are several other articles that are relevant to what we're talking about today. But there are others that are well worth the read but are not really the subject of our workshop today.

Article 9 is about accessibility. Article 30 is about participation in cultural life, recreation, leisure and sport.

We have one presentation that covers that as part of the Convention.

So let's look at Article 9. You can see some text there. The important thing here is it says that states parties, that means governments really, shall take appropriate measures to ensure to persons with disabilities access on an equal basis with others to information and communications including information and communications technologies and systems. And importantly both in urban and rural areas.

Now, I think governments are only just beginning to realize what that means. It's quite important. And we think that means that a lot of countries will start implementing relay services and other ways of making public communications more accessible to deaf people and people with speech problems, all of that sort of thing. So that's driving what we're doing today.

We believe governments come to the ITU and say: How do we do this? And we are hoping to be able to provide guidance on that.

Article 30 is about access as we have spoken. Again it's on an equal basis with others. And governments have to take appropriate measures to ensure that persons with disabilities

enjoy access to TV programs, in some places T V programs are inaccessible to a lot of people. And it applies to films, theater and other cultural activities. If you want to visit a museum and you can't read what it says on the displays, it's inaccessible to you. Or if there are audio presentations in a museum and you can't read it, it's inaccessible. These things have to stop.

What we're trying to do is to make clear that we need to have new standards. ITU needs to do some work. We have to consider the Convention in almost everything that we do. Not just writing standards. But particularly in the ITU, the ITU is bound by the Convention, the United Nations is -- and all its member bodies and the ITU is one of them. They must behave as if they are states so -- states parties so they have to do all of these things. As you can see we are doing our best to make sure this workshop is accessible to as many people as possible.

And at this point I would like to say that I would very much like to hear at some point through the day if you think there's anything else we could have done to make the meeting more accessible. So please, tell me that during the day. And if it's something we can do quickly, we will. But if it's something that needs a huge investment, we'll have a thing about it and see how best we can meet those requirements.

So that's the end of my brief presentation. What we're going to do is as you probably remember from the program, we have various sessions here. And we're going to have questions briefly at the end of each session. And then towards the end of the day we'll have a much longer wrapup session where we can work out what we need to do in the future in the ITU to make progress in all of these areas.

So that brings us to the first presentation of the day. And it's not from me or Floris. But it's from Paul Jones. Paul works for Cisco. And he has great interest in accessibility I hope you won't mind but he's gradually losing his hearing so he has a vested interest in all of this.

Paul is working on a project that we call "Advanced Multimedia System" within ITU. Sometimes known as H.325. Paul will explain what's going on here. And on some of the accessibility issues. Here is the microphone.

>>PAUL JONES: I'll try to speak up a little bit.

(Off microphone).

(Off microphone)

(Speaker is inaudible).

>>PAUL JONES: Is this microphone better? Okay. Is this better?

>>BILL PECHEY: I think she is hearing you now.

>>PAUL JONES: The interpreters can hear okay? Okay. Very good. So as I was saying I'm also the Rapporteur for Question 2 here in Study Group 16 which is standardizing each (inaudible). And so the first slide is just a little bit what H.325 is. And it is the next generation of multimedia system. And our next generation because we had two generations on previous systems before this one the first one was H.320 which was used for videoconferencing and PSTN and then we had H.323 which is multiple -- which is multimedia --

>>BILL PECHEY: Hang on, Paul. We have some complications with the microphone.

>>PAUL JONES: Must be a screensaver.

>>BILL PECHEY: Please carry on. I think we have fixed it.

>>PAUL JONES: And the second generation multimedia systems are H.323 which allows for the future of IP numbers. In addition to those we also have some other standards (inaudible).  
(Off microphone).

(Speaker is inaudible).

>>PAUL JONES: So one question I'm often asked is --

>>BILL PECHEY: Speech-to-text lady is not hearing you can you get closer to the microphone?

>>PAUL JONES: I can certainly try.

>>BILL PECHEY: Switch off (inaudible).

>>PAUL JONES: Okay. Maybe this will work.

>>BILL PECHEY: Maybe get a bit closer.

>>PAUL JONES: I can try.

>>BILL PECHEY: Yeah, please.

>>PAUL JONES: I can also yell. This might help.

(Chuckles.)

>>PAUL JONES: Many of you know I'm fairly soft spoken so I do apologize. And that's partly due to the fact that I also have a hearing problem myself. So when I speak, it sounds very loud in my head. Though outside it's not very loud at all. So I do apologize.

So one of the questions I'm often asked about H.325 is are we reinventing the wheel? We already have multimedia systems that work over ISTN and those that work over IP networks. Are you getting that static?

Okay. Okay. Sounds better.

So one of the things that's important to remember is the technology is always changing so although we do have systems that exist today, we always have to look forward to the future at new multimedia systems and new multimedia abilities and something that's probably particularly well known in the accessibility community is the current generation of multimedia systems that we have, capabilities like text were not included at the beginning. Mr. Hellstrom again also worked very hard to try to address those problems but multimedia became -- although multimedia exists usually the focus was just on voice and video. And things like text and other capability were the second thought.

So one of the issues with existing multimedia systems is it's very difficult to introduce new functionality to the system. There's no standard way to add new capabilities. And as an example, suppose you have an IP phone and it implements voice over IP or video over IP. And you want to add to that like application sharing or white boarding, it's actually very difficult to do that. You have to go to the vendor that manufacturers that piece of equipment and actually ask them to introduce that new functionality. And it's not trivial. It's actually very difficult. So what we want to be able to do with H.325 is to make that easier.

So what we are doing is actually defining what we call a platform. As opposed to building a system that defines how to do voice and how to do video and how to do text or any other application, we can find a mechanism that allows software developers or hardware developers to build the applications with the system. In other words it's a very open system that will allow for any kind of application to be introduced.

I guess most important thing here is it's not just a thought that voice is just one of many applications that we're considering and these are some of the applications that I would like to personally see is voice, video, text, application sharing, there's quite a number of different applications the



last one on the list is something that's very different. Flashing lights for the deaf. Now this is something that if you have an IP phone today, a standard IP phone from any vendor in the world I have not yet seen one that there's actually a way to alert the user that there's an incoming call other than the phone ringing and for the phones that come from manufacturers there is a flashing light you might have seen it but there isn't a mechanism to allow this with IP phones.

Another challenge of course is that even if there were, it's not necessarily a good way to (inaudible) that allows for text communication. And we do have (inaudible) for putting text on those IP phones. But again you need to be alerted that there's an incoming call. So one of the things that H.325 will allow is for external device to actually alert the user. And again, the way that it's constructed is it would actually act as an application just like all of the other applications. So there would be very standard interfaces on the system to allow for communication and to allow for (inaudible).

So AMS will be different.

>>BILL PECHEY: Sorry for the pause there. I guess they are testing a different microphone. It doesn't seem to have solved the problem. Paul, if you'll carry on.

>>PAUL JONES: Sorry. So what we want to be able to do of course is to enable any kind of application that can run on any number of devices. So I mentioned before that we are building a platform -- not only are we building the platform but the application for the voice, the text, the flashing light all of those applications can exist on separate devices they are not built into a single physical device it could be but it's not a requirement with H.325. So if you can imagine that you might be able to view a presentation on a mobile device that you're -- you're actually -- perhaps you're attending a conference and you want to be able to see that presentation on your mobile device. And you can also view that same presentation in the back of a taxicab. If you're riding down the street. There are actually taxicabs that are equipped with video display monitors like this. And you would be able to see the presentation in the back of the taxi.

So essentially the multimedia content that you'll be able

to see, to hear or it will be with you or would be accessible on a wide variety of devices.

This last one is probably less interesting for this group. But nonetheless, perhaps they are popular. Is the ability to actually use and certainly you could allow for any kind of application that would include video games as a part of a communication dialogue so you don't necessarily have your video game entirely separate from the other communication that you have with somebody that you're communicating with. But it gives you the idea of the power and flexibility.

One of the things that I would like to be able to achieve with H.325 is improved productivity. To be able to work better. So many of you have probably attended several conferences. And using various kinds of web technologies. And you'll know that in order to get into that conference usually that involves dialing a phone number. It may involve -- it may involve dialing a phone number it may involve using a web browser to launch a conference and trying to join that conference. And what we would like to be able to do with H.325 is make all of those various modes of communication work together fairly seamlessly so that you don't have to do multiple things in order to use multiple modes of communication. They would all be immediately available. If you use communication with a conference bridge all of the other modes would be immediately available to the various devices so a single click on the computer and you could watch a web session.

And of course we want to be able to have the freedom to roam. So mobility is a very important aspect.

I mentioned that it is a new architecture. It is going to be quite different in design than the previous systems that we've built here in the ITU. Most of the points on the slide (inaudible).

There's a concept in this system also of a personal network. This is something that might be in your home. It might be in a car. Or it might be in the office but you to give you an example of what we mean by this perhaps this meeting is a very good example. Rather than having to come down to the podium and use this particular machine in order to get the presentation, if we actually achieve what we aim to with H.325 you could wirelessly communicate with a projector from my laptop

and give that presentation to another person. There are certain security issues that we have to work but that's one of the objectives so H.325 has a platform. And the way we're building the interface is between the applications. It doesn't necessarily the communication is remote. It could be local so we have people interested in Korea and Japan to do things with H.325 with what they call a network mobile which essentially allows for various devices within the home or in the car to communicate with each other to carry out various functions. And this slide -- I'll skip this one but it gives more of an overview to basically what I spoke about. As well as this one. I'll mention this slide we'll stop on accessibility considerations. And we recognize accessibility is something that we have to consider in media from the outset. As I mentioned that wasn't done with the previous generation in these systems. So we are doing it with this generation.

We are trying to consider how it is that applications might be changed, how we need to design the interfaces to enable for various kinds of disabilities.

And so we are looking at the work that's being done in Question 26 with the accessibility checklist. And we're trying to make sure that the design is proper. And of course we'll definitely be asking Question 26 to review what we're doing with H.325 once the work presses to a point where we can seek input.

Some of the functions that we will be looking at in the network and were demonstrated here actually at this meeting are ways to try to automate the translation between speech and text. Text to speech. And even speech to speech. And with H.325 that is one of the goals that we do have requirements to try to provide that kind of functionality within the network.

So H.325 has a simple vision. It's definitely not a simple system.

There will be a lot of components to H.325. But it will be designed in such a way that no one piece is too difficult, too complex. Unlike the systems in the past where everything that the system did was built into a single monolithic application very large application to do voice, media, communication within the network. And the other functions that would be carried out. With H.325 we tried to break down the problem into discrete pieces so that one application only has to

worry about the functions of that one application. Not the whole system. That's perhaps the one thing that will actually make it easier to build a H.325 system.

So again it should be a system that works on -- not just one device it should be fairly extensible for any one application. And that's the end of this presentation. I do have some backup material that actually goes into a little more technical detail. Not too deep. I won't present that here. But if you're interested, do get a copy of the electronic presentation. It should be (inaudible). And if you have any questions at all please feel free to send me an e-mail. My e-mail address is at the front of the presentation and I'll be -- I welcome any questions you have.

>>BILL PECHEY: Thank you very much, Paul we have a few minutes before the start of the next session that we can take questions from the floor. So has any got any questions? We have a couple questions. In the front row, yes, please press the microphone button. You can see --

>> There it is, 1, 2, 3. Okay. I'm very interested in this H.325 standards. What is the aim of this standard in record with the existing standards and especially with AMS?

>>PAUL JONES: Thank you. So that's a very good question. And I'm often asked that question. And the answers are not necessarily politically correct. So I'm not sure I'll offend anybody with my answer.

But essentially IMS and all of the work we have done so far is largely a transition from PSTN to IP. That in and of it self is very good. It's wonderful. But I also have a (inaudible). So the question is what new functionality will I get? Do I still have a phone? And what I've seen with IMS and what I've seen with all of the work that we have done before and this is with H.323 is that I largely replicate the functionality that existed before on PSTN or ISTN networks so H.323 was wonderful insofar as it allows us to move from a PSTN or -- to an IP world. But I had video functionality with H.320. H.323 allowed us to have video function Alton an IP number what we want to be able to do with H.325 is we still want to allow video capability but we want to allow application sharing, file transfer and all of the various modes of communication. So sometimes the usage scenarios are probably the best way to

answer your question.

What I would like to be able to do is use my mobile phone and talk to somebody and I walk into a telepresence conference room and I take the phone and place it on the table. I don't do anything else. I just place it on the table. And the call transitioned from a voice call to a full telepresence call with voice. With no button presses. Nothing else has to happen. I want to be able to communicate with somebody maybe I'm using my desk phone, maybe I'm using my mobile phone and the person I'm talking to would like to receive a file maybe this presentation I'll say hold on let me send it to you I can go to my computer and right click on the file and I can say send to and the person's name that I'm talking to will actually appear right on the computer and the way it's made possible is because H.325 is a descriptive system because my phone is talking with my PC. My PC's file transfer application is aware of the call. And the fact that I'm in communication, it can then appreciate the file transfer. I don't have to do any additional button presses.

So it's really -- it's really taking that next step, delivering the general generation multimedia capabilities the things that as far as I can see it cannot deliver with the existing systems we have today.

>>BILL PECHEY: Thank you, Paul. I wonder if for the sake of the captioning and the interpreters whenever anyone asks a question they can give their name and affiliation. So please just go back to the question could you tell us your name and your affiliation, please?

>> Okay. My name is Emmanuel Buu. And my organization IVEs.

>>BILL PECHEY: Okay, thank you very much. I had another question?

>> Thank you Mr. Chairman. I would be -- I would like to be sure to understand clearly the subject here in AMS and the probable difficulties to which the level of ability.

In Slide 18 you want to show -- you were showing that accessibility needs were not considered in the development of H.323 and SIP.

So for the label of AMS which is your objectives, you intend probably to make some extension to SIP? Thank you.

>>PAUL JONES: Thank you, that was -- within H.325 we have no plans to do any work with respect to H.323 or SIP so those are

completely separate and not within the scope of the H.325 work.

>>BILL PECHEY: Thank you very much. I think we must draw the proceedings there to a close. Thank you very much, Paul, for that presentation. What I would like to do now that is the end of Session 1. I won't have a formal break now but we will continue as quickly as we can but what I would like is for the speakers in the next session is for Christopher, Judith and Karen to come up to begin to give thinker presentations we have interpretation setup so we'll have that while we continue to get organized. Thank you, everyone.

>> Can everybody see me clearly?

>>BILL PECHEY: It looks like everything is reorganized. So - Judith is coming up. I think we can get started. Would you like to start your presentation, please.

>>CHRISTOPHER JONES: Okay, good morning, ladies and gentlemen. I'm very honored and privileged to be able to come and give you this presentation here at ITU this morning. I would like to talk about our telephone. And our we're striving for functional equivalence in relay services. I would like to ask one simple question before I carry on. How many people here actually use or make voice calls? Who did this morning? Who made a voice call this morning? So a fair number of you.

What happened or what would happen when you can't make a voice call? Because you have a bad cold or because you are sick in some way or you became temporarily deaf or something happened? How would you make a voice call?

Now, deaf sign language users, deaf people with speech, deafened people, deaf-blind people, hard of hearing people have a basic human right to be able to access telephone calls. And they need to be able to access it in the most functionally equivalent way as possible.

Now, that would enable them to fully integrate in society but more importantly in their own place of employment.

The use of telecommunication methods such as e-mail, fax, mobile text should not be used as a replacement to a telephone call.

Now, the reason for this is because the telephone call is a two-way communication process as opposed to a one-way communication process which the aforementioned methods are.

Therefore, relay services are the only suitable and

appropriate way to access the telephone for deaf people.

Now, there are many different types of relay service. Some are more functionally equivalent than others.

What we need to do is examine the process, the collaboration process -- the call operation process. And we need to strive towards making telephone access for deaf people functionally equivalent. Now, the Captioned Telephone Relay Service is perhaps the most functionally equivalent type of relay service.

Now, traditionally hard of hearing people have not really liked using textphones. And don't see themselves as perhaps deaf in that way and needing special equipment. But instead themselves do at the same time need help to access the telephone. Therefore, hard of hearing people in different countries are starting to realize that this is the most appropriate method of communication for them on the telephone because it actually behaves like a regular telephone conversation and they love it.

It's difficult to use the pointer with sign language. But -- okay. So this is how CTRS works, Captioned Telephone Relay Service works.

We have a hard of hearing caller who wants to make a telephone call to a hearing caller. Now, they both -- hearing people can hear each other. Maybe they can hear each other but the hard of hearing person might not understand everything that is being said or a word or a phrase or perhaps even a whole paragraph might be missing. They might not quite catch everything because of their hearing loss.

So the hearing caller speaks using the audio channel. And that is split into two. One goes back to the hard of hearing caller. And the other goes to a captioning telephone relay center where there is a captioning assistant who will listen to the utterance made by the hearing person and would repeat verbatim what the caller says into some voice recognition engine.

Now, that is then in turn transcribed into captions. And the same caption assistant will read back to make sure that the information is correct. If it's not, then they will jump into quickly type in the odd word or the odd sentence that was missed.

Those captions go back up on the display to the hard of hearing person so they can understand what has been conveyed.

Is everybody with me so far? So why do hard of hearing people, deafened people, deaf people with speech actually prefer captioned telephone calls and the relay service? Well there are four main reasons. There's the transcription speed. There's the level of accuracy. There's the level of transparency and a level of control.

So first of all let's look at the transcription speed. The transcription speed from speech to text is almost in real-time.

Now, there will always be an inherent delay of course. But the voice recognition engine will not produce the first word until it's heard a number of words so that it can establish context. The apparent delay it's not really apparent in the relay call.

Furthermore, the level of accuracy for the conversation is between 150 and 180 words per minute. The level of accuracy is 98%. Above 180 words per minute the level of accuracy will decrease slightly. However, but that's no different from two hearing people on the telephone where one is speaking very fast and the person on the other end needs them to slow down because they can't understand their speech. So that does. So really it's no different from two hearing callers who are speaking very fast and the same thing will happen with a captioned telephone call.

You know, so -- but everything else will be reasonable. ETSI standards suggest that the minimum -- sorry; minimum level of accuracy for captioned relay service should be 90%. But in my view, that would lead to a less functionally equivalent service. Therefore, that's discriminating against hard of hearing and deafened People so we need to perhaps revise that and move towards working at 98% accuracy.

Now, talking about the level of transparency, now, hearing callers in a captioned relay service -- using captioned relay service are often not even aware of the presence of the -- that the conversation is actually be relayed. And that would of course be the highest level of transparency that would have been achieved.

It depends on the call operating procedure being followed,



however. And it needs to be made sure that the captioning relay system does not interfere in the call.

And finally, the level of control. This is perhaps the most important part of a relay telephone call. Who has the control of the call? Is it the operator or is it the deaf person making the call?

With the Captioned Telephone Relay Service, the captioning assistant is enabled to intervene in the telephone call. Therefore, the control is given to the deaf or hard of hearing caller. And they can take the opportunity to decide whether or not they are going to explain that to the relay caller or not.

The privacy issue is very important. And a real sensitive issue. And we certainly need resolution on that.

In many nations there are rules where the hearing person must be informed that there is a third party involved in the telephone call, in the conversation.

Now, if this is actually applied, then I would suggest that that would lead to a less functionally equivalent service. Therefore, it's imperative that this intervention is avoided where possible. And you'll hear more about that later from somebody else's presentation, I think Maya.

So this is certainly a challenge for ITU. We need to create standards that can enable all of us to enjoy the most functionally equivalent service as possible. Not only technical standards do we need to focus on. But we need to consider the human factors, also.

And the call operating procedures, ethics, privacy, et cetera.

We also really need to examine the best practices around the world. And incorporate those into that. Into our work.

With the UN's Convention on the Rights of Persons with Disabilities, we certainly have a challenge to ensure that all of the countries in the world are providing us, deaf people, with a range of different services, different types of relay services.

Many deaf people do not have the choice. Some do. Some do not.

Deaf people simply need a choice of relay services so they can be integrated effectively socially. And in their -- to

enable them with career progression. Now, remember, it is our telephone call. Both hearing people and deaf people want to be able to enjoy it and feel comfortable with it.

Most importantly, it has to be at no extra cost to either user. Whether they are deaf or hearing. Other than the cost of a normal telephone call.

That, ladies and gentlemen, is our challenge. Thank you.  
(Applause).

>>BILL PECHEY: Thank you very much, Christopher, that's a good presentation to set the scene. We have a couple of minutes for a couple of questions for Christopher. Any brief ones, any questions. There's also an opportunity later on if not now no immediate questions. Okay. So maybe we can move on to our next session. Oh, was there a question? Oh, Ruth Meyers please.

>>RUTH MEYERS: Just -- Ruth Meyers from TAG. Just very quickly -- just a very quick question I would like to clarify. In the transcript it says that the privacy requirements are -- of standardization in transcripts, it says privacy is a requirement, it varies between states. Which of the two is correct? Should it be privacy requirements of nations, which is countries, or privacy requirements of states, which would be states in the USA?

>>CHRISTOPHER JONES: Yes, perhaps I can clarify, when I mean states, I'm talking about individual nations. So different countries. You have states in Europe, Germany, France, Switzerland, Sweden, et cetera. I hope that clarifies the question.

>>BILL PECHEY: Was there another question? I think not. Okay. Well, thank you. Let's then start our next presentation from Karen Peltz Strauss. Karen is a lawyer from the USA and specializes in legal work in relay services.

>>KAREN PELTZ STRAUSS: Hi. My name is Karen Peltz Strauss. And it's wonderful to be here. I wanted to tell you a little bit about my background. I'm a lawyer as Bill mentioned in the United States. I've worked on telecommunications accessibility issues for the last 25 years. And I've written many of the laws in the United States requiring accessibility so I worked with our United States Congress to write the relay section with people like Judy Viera and various other deaf and hard of hearing advocates in the United States. So I guess I'm trying

to get forth to you that I know these laws from their beginning. I also worked on our Section 255. Which requires telecommunications accessibility of products and services. In addition our rules and laws on closed captioning. As well as our laws on hearing aid compatibility.

So you should feel free to ask me any questions during the presentation or after, during a break. Because I can share with you my knowledge from the various years that I've had the opportunity to work on these issues.

What I would like to talk to you today about is to focus on functional equivalency. It's more of the same theme. In the United States it this has been the guiding principle of our telecommunications relay services. And specifically the communication assistant who is also called the relay operator is called a transparent conduit.

That individual really is not considered a person. That person is not considered a third party. Rather, it's supposed to be like a dial tone. And the -- our Federal communications commission, which we call FCC for short, is very clear that privacy has to be absolute across all United States. And that the telecommunications relay assistant cannot censor or monitor anything that goes on during a relay call. They must relay calls verbatim, word for word. They cannot intentionally change any of the content. And they can't disclose any content, as well. Nor can they keep records beyond the duration of the call.

There's one exception to that rule. And that is for speech-to-speech relay services. I don't know how -- whether any of you are familiar with there. This is when a communication assistant has a specialty in understanding difficult to understand speech. And the relay assistant interprets or relays the speech that a person with a speech disability says to other people.

Because in that situation sometimes it's hard to get the speech disabled person to repeat things, the relay operator is allowed to hold onto some parts of the conversation in case the speech disabled person wants to make additional calls. But once those calls are completed, that information also has to be erased.

Next slide.

In the United States we have had several practical situations to test these various principles. One of them is called HIPAA. It's called the health -- let me get you the correct name. It's called the health insurance portability and accountability act. And what that says is that everybody has a right to have privacy to their health records.

When Congress passed that law, however, it also created a situation where if somebody's health information is going through a third person, that third person has to sign something called a business associate contract, which basically says that the patient has given that third person the right to communicate information about that patient's health records. What was happening in the United States is that relay services were refusing to allow patients to talk through the relay services without signing these contracts.

And we felt that that was a violation of the -- all of these principles that we have just talked about because the relay operator is not really a third person. And so we went to the FCC and the FCC agreed. And they said that these contracts did not need to be signed by the relay operators exactly because of what we said. It was a relay operator is really just a dial tone. It's really just a transparent conduit.

In another case where this was tested, a deaf man applied for a job. And he had a conversation with the potential employer. And the conversation was over a relay service. And he got denied the job. And when he went to court and tried to get the conversation that he had had with the employer admitted into the court documents, the judge said no. The judge said that this was something called hearsay.

Now, it's funny because when I was doing this, and I had somebody review my presentation, they said: You need to explain the American rules on hearsay. Because other rules I know in Britain are different. And your courts allow hearsay.

Ours do not. Hearsay is basically a conversation. It's an out-of-court statement that you want to try to get into court by somebody other than the person who made the statement.

And so you want it to be admitted for the truth of the statement. And here the court was saying that because the relay operator made the statement, that it could not be admitted

because the deaf person had not actually made the statement.

And again, a court case was brought. And the judge was very, very firm that this statement could be admitted that it was not hearsay. And he relied on a number of different things. One of which was that the CA, the communication assistant, is no more than a language conduit. And he compared CAs to voice translators or interpreters. He said the CA only has a random connection to the caller. So in other words, the caller is not choosing the CA. It's just a random selection.

He said also the CA has no motive, no intention to mislead or distort anything during the call. And also he said that CA's qualifications are set by the Government.

The judge also went back to the first reasons that were in the former slide, all about how the FCC has determined that a CA must relay verbatim, not alter conversations, et cetera.

And what was really wonderful is that the judge also looked to our Americans With Disabilities Act, which is the statute that created relay services. And said that denying the admissibility of statements would strip people with hearing disabilities of a vital source of evidence. And I'm going to quote to you from what he said. He said deaf persons could not conduct important day-to-day affairs over the phone such as calling the bank or the doctor with the same ability to rely on the statements made to them by the other party that is enjoyed - - to the same extent as enjoyed by hearing persons. Such a result is at odds with Congress's intent to make disabled persons full and equal participants in society.

This was a wonderful case for us. It was the first time that any -- that these issues went to Federal court in our country. And it creates wonderful precedent for future cases.

Next slide.

So now where are we? Well, now we have advancements in relay services. And I won't go into this too much. Because I know that Judy will talk a little bit about it. But we not only have the traditional text-to-voice relay. We now have video relay services, which allow people to communicate through interpreters. Using their own language. It's very, very natural.

And we have captioned telephone service, which Chris talked about. Next slide.

But what has happened with these additional new kinds of relay services is that there have been no challenges. Unfortunately one of the other kinds of relay services that we have is called IP or Internet protocol text relay. And we have had huge amounts of fraud associated with that.

We have had people from countries outside of the United States use this service anonymously to make fraudulent calls and make huge -- large purchases of quantities of goods using fake credit cards. And we have also had some people in the United States make prank phone calls, fake phone calls like teenagers.

The consequences that a lot of businesses in the United States have now begun hanging up on relay calls. They don't want to accept them.

So we are having more cases than ever before, even though our relay has existed -- well, relay services in the United States began actually in the '70s. But they were required by law in the '90s. In the beginning we didn't have major problems. Now we have very major problems with hangups.

We also have at least one law in one of our states that is conflicting with the transparency obligation. It's a law that is saying that the people have a right to privacy. And in making phone calls. And I'm not talking about relay users. I'm talking about general voice users have a right to privacy. And there are criminal laws in the United States that prohibit monitoring and eavesdropping of telephone calls. And this one state is saying that you have to announce the presence of a communication assistant on the call because otherwise the hearing person will not know that a relay call is being made. And this is becoming a conflict with captioned telephone because as Chris pointed out, that is the most transparent of all services. Because when you make a call, the relay operator is not involved at all.

And so there is this potential conflict. Next slide.

I'm going to actually skip this slide. This just goes through the different kinds of relay services actually no. Actually hold it there. That's fine. Next slide.

So the transparency solutions, actually this is still from a former slide. One of the things that we have been arguing as consumer advocates is that users should have a right not to announce the CA. This is from a former slide. But they are

saying because the CA is transparent, you should not have to announce a CA and that this is not a criminal matter. Because again this is not a third party. This is a dial tone.

We also have a new numbering system that requires people to register for an Internet protocol type of services as I mentioned we have a lot of different services now in the United States. We have IP relay. Text and video. We have captioned telephone. And we still have the basic traditional relay. And what is happening is that traditional relay is actually not disappearing but almost disappearing. It's going lower and lower each month. That is the yellow line on the bottom. I realize that some of this is hard to read. But you can see that -- let's see. VRS is I think the green one. So you can see that that's video relay service with sign language interpretation. You can see that's a huge service now in the United States. And then the purple one is the IP text. You can see that also that has gone very high, but it's stabilizing and kind of evening out.

The numbering system that I just mentioned to you requires every individual that has an IP based text or video connection to register themselves. And one of the reasons this was put into place for two reasons. One for emergency purposes because when people register they give their location information. And then when a call is made, the emergency center will receive that information about where they are and what telephone they are calling from.

The second reason was to reduce fraud. Because the thought was that if you have to register all of these entities using the system will not register.

So it's my prediction that that number is going to go down because the registration requirement is going into effect in 11 days, November 12th.

I want to just pause here for a second -- actually can we go to the last slide and mention that one of the other problems that we have had is that relay in our country under the Americans With Disabilities Act is defined as a service that is between somebody with a disability, hearing or speech, and somebody without.

Now, that has created a little bit of a problem. Because

there are so many different kinds of relay services that sometimes a person, for example, that wants to use speech-to-speech relay to communicate with a captioned telephone user using that kind of relay or video relay communicating with a TTY based relay technically our law doesn't cover that. So our FCC has been resistant to reimburse for those kinds of calls.

So one of the things that we've done and I'm actually going to deviate from my slides at this point and use the most of the remainder of my time to talk about this is we now have a new law, a new bill, a proposed bill that's pending in our Congress. It's called HR3101. And it would change this part of the relay law. And it would say that a relay user can communicate with anyone. It doesn't matter whether you're communicating with a person with a disability or without.

Now, the HR3101 is important to know about in addition to relay. It has a lot of other sections. And I was particularly interested in the first presentation that was given by Paul. Because that -- I definitely need to connect with Paul. Because our new proposed bill is going to be very influenced by the system that he talked about.

The laws that I and others worked on in the 1980s and 1990s all deal with telecommunications very few of them deal with the Internet actually none of them deal with the Internet and now that communicates are moving to the Internet we need a new law one of the things this bill would do is extend all of our accessibility protections to the Internet. And I wanted to tell you about a coalition that we created in the United States called the Coalition of Organizations for Accessible Technology. It's called COAT. COAT. And our web site is [www.coataccess.org](http://www.coataccess.org). We have international friends of COAT so I encourage you to join, it's free to join. But we are trying to get this bill passed. It won't only extend our telecommunications laws to the Internet it will also extend our closed captioning laws.

We have wonderful closed captioning laws. I'm very proud of what we achieved in the United States. We have nearly 100% captioning. But if you watch the same program that's been captioned on TV and you go to the Internet, it's not captioned. And we're trying to change that. And what's wonderful about that is that when we do that, we're going to bring captioning to



the world. Because all of those television programs that we have in the United States that's captioned will be captioned for people all over the world now. Once the captions go to the Internet.

There's a lot of other parts to the law. We also have a section in the law for real-time text services. And I know that we're going to hear more about that from Gunnar. But we have a requirement in the law for the FCC to develop a standard for real-time text.

We also have a requirement to help low income people get equipment, specialized equipment. Especially deaf-blind people to get specialized communicates equipment. And also to help low income deaf and other disabled people get subsidies, low income subsidies to help pay for broadband for IP services. It's really a wonderful law again it's HR3101 it will take a while to get through Congress but we're working on it.

I also wanted to mention for those of you who are interested in relay services I have written a book I don't want to plug it too much but I don't get a lot of royalties I can promise you I only want people to have it because it's a resource it has five chapters on how we got relay services in the United States and it also has sections on our Section 255 and hearing and compatibility, closed captioning and hearing incompatibility. I have some information if you want it. It's available on Amazon.com and through various vendors in your -- just really quickly the next slide and then I'll finish up. I did submit two papers on -- one is on the transparency issue and the relay issues. One is on video communications. And we talked a little bit about this before that video relay calls are increasing.

Not only for sign language users but hopefully one day, as well, for people who need lipreading. And next slide. Just a picture of video relay, video communicates. Next slide, please. And there are a lot of different questions that we have. Again, these -- I really need a day to talk. Not 15 minutes. But we have all kinds of issues about the role of Government and providing affordable video equipment. Equipment interoperability right now we don't really have that. We have it to a certain extent. But our equipment interoperability is limited to "Videotelephony and Video Relay Service Polices

Affecting US Federal Employees with Communication Disabilities". And you can't just go to a store and buy a piece of video equipment and use it. You have to get the equipment from the provider. Next slide. We have lots of laws requiring all of these video communications.

And these are the various laws. Again, they are all described in the book. I don't have time to describe them today. Next slide. Please.

And then we have a lot of issues that are still unresolved, the cost of video communications, right now it's paid for by the American public. Everybody shares it. But in Federal agencies it's not clear who is paying for it yet. Whether the agency should be paying for it or the American people spread around. There are all kinds of security issues, especially when video communications are used with agencies that deal with defense or taxes or people's benefits like Social Security. We have similar issues with confidentiality. Issues with emergency access. Again, I mentioned that right now we have a system where the emergency centers will be getting the numbering and location information from video communications when they are IP based. Next slide.

And again I submitted two papers so you have them on the Internet. But feel free to contact me if you need to contact me. You can contact me through the COAT access address or you can contact me directly. I don't know whether I included my e-mail so it's kpsconsulting@starpower.net. Thank you.

(Applause).

>>BILL PECHEY: Thank you very much, Karen. Very interesting. As Karen said, she passed two extra documents which are available on the workshop web site. You can download them from there and read them. Very interesting. Anyway, we have time for one or two very brief questions if there are any. As I said before, this is not the only opportunity to ask questions. We have David Meyers.

>>DAVID MEYERS: I would like to see how you feel. I'm David Meyers from TAG and I would like to ask you one thing which bothers me as anybody knows (off microphone) broadband access using IP networks. You have to use ISP provided. Now (inaudible) ISP providers the work code of the transcript of every conversation that's made or whatever is transmitted

through ISP. Just would that conflict with what you termed a discrimination issue.

>>KAREN PELTZ STRAUSS: Yes, I do think that would conflict with the views in the United States of privacy and confidentiality. If what you're referring to are relay calls. That would be prohibited by American law.

>>BILL PECHEY: Thank you. Any further questions?

>>EMMANUEL BUU: Emmanuel Buu speaking. In Europe where less advanced than the United States regarding the relay services. I guess that Member States are looking for a lot of guidance to see what's the best mode. And especially business or financial law of it. What is your opinion on -- with what has been happening in the US since a lot of views now on how all of this should be working. I mean funded.

>>KAREN PELTZ STRAUSS: We have I think a fairly good funding system in the United States. We have -- one of the things that was very, very important to us when we worked on the Americans With Disabilities Act was to make very clear had a we wanted relay services to be like any other utility service. We did not want the funding to come from the Government. Because we felt that if it came from the Government, it could be taken away just as easily. So instead we wanted it to be incorporated into the cost of providing telephone service for everybody.

And we already had a principle that's called universal service in the United States. That allowed for rural calls to be treated the same way.

So when you have a telecommunication system it's cheaper to provide telephone service where it's closer to the central area where those services are provided. People in rural and farm areas were not paying any more just because they lived further away so their service was already subsidized by everybody. And we said we want the same thing for relay. We want relay to be the cost to be spread across the whole community. And we pushed and pushed for that concept. We didn't want relay to be treated as a charity. We wanted it to be treated the same as all funding. And that has worked very, very well so the way it works is that everybody in the United States has a surcharge on their bill and most of the time you don't even see it. It's anywhere from 10 to 15, 25 cents which is very little.

And that way the costs are spread throughout. Because remember that relay is not just for deaf or hard of hearing or speech disabled people. It's for hearing people, too. And that was the justification. This is a service for two people. It's both sides. So that has worked very, very well. Now video communication, video relay in the Government, we have a separate relay system for the Government. It's silly. And the only reason that that happened was because it was created before the national system was created. I think if the national one was created first, we wouldn't have that.

So the Federal Government generally has been paying for it's own relay services except for video relay which I think is going to be paid for with the same money as the regular relay.

>>BILL PECHEY: Thank you very much. I saw a hand up. Do you have a question? Please keep it brief.

>> Hello, I'm Jeff McWhinney. From the UK. Most countries in the world don't have relay services yet. Any kind of relay service. A lot now are discussing on how to develop and implement relay services.

Looking at what you've presented on the screen, it seems that text relay service is a declining type of service. Would you agree to propose that we forget about this and move immediately to IP telephony and Internet, whether it's CapTel, video relay or IP relay by text. And forget about the legacy. Because in Europe when we look at text based on PSTN, you know, as the only form of relay service, I have some doubts about that. What's your view on this?

>>KAREN PELTZ STRAUSS: Okay. For every kind of -- for most relay services, yes, absolutely just forget about the text. With one exception. That's Captioned Telephone relay Service and the reason for that is the people that are using this are people that have been used to using the regular traditional type of telephone in the past. So many times it's older people. And they want to be able to continue using that kind of service.

So for them, you still want to have the basic non-IP version. But yes, without a question, there is really little purpose in trying to perpetuate a text-to-voice system that's not IP based. It's slow. And it's not functionally equivalent anymore. Not when we have these other technologies available to us. I just want to mention that unfortunately in the United

States we do not have a mandate yet for the version of captioned telephone. We have IP captioned telephone available but we don't have a requirement for the non-IP version. As a consequence -- and here I am talking about American states -- we don't have captioned telephone available everywhere in the United States in the non-IP version. Which is a problem. So we're working on that.

>>BILL PECHEY: Okay. Thank you, everyone, I'll have to draw that presentation to a close there. Thank you once again to Karen for that. It's very interesting, very stimulating and I think that some ideas from that that we can build into our work.

So could I now ask Judith Viera from USA TDI to give her presentation, please?

>>JUDITH VIERA: Thank you very much, Bill. I'm very happy to be representing TDI here. The Telecommunications Organization for the Deaf. And we are strong support for equality within the telecommunications for everyone. And also for captioning. And for your -- and information technology.

And I would like to start by making sure that we all understand that relay services, we take a moment to watch different people. Some have different modalities that they use. Everyone is different in the audience.

So if we go on. Here you see all of the different types of relay services. And it's really important to see here that recently we were talking also about the relay telephone services. And that it was used by different people. So we start with text and then also to the operators. Which was called VCO. Voice carryover.

So you are able actually to directly talk to the other person. And the other was using for information to the other person what was being said. So it was going both ways. And the other one was HCO. Which is the opposite. Where you want to hear what the other person is saying. And then it was typed by the operator. But the person cannot speak.

And then captioned telephone. That was already clearly explained by Christopher Jones. And if we look at Internet text, she said that -- mentioned that text was set up only for -- and for the Internet, not for the TTY. And then if we look at Internet based video and then you need a high speed band

connection that everyone has to have. And it also costs more. So we want to make sure that if we use that, it's not -- yeah, exactly. It's not actually functionally equivalent because you have to pay more.

And you also have wireless. Which is the relay that -- so if I'm driving around, I have a Blackberry and I want to communicate and it's easy to use my Blackberry for that so I can communicate through the Blackberry and use the service, as well.

And then if we look at total conversation. That Christopher has been already -- it will be covered later; sorry. And also Karen explained also speech-to-speech. So people who have cerebral palsy and have a difficult time expressing themselves. And this depends also on the operator then. And then the deaf-blind relay. That's a really new conceptual state so people who are deaf-blind they rely for example on Braille and they need someone who actually reads what -- types slower and can read what they are saying. And also enlarged print on the screen so they can read what's being typed.

So these are the different kinds of relays. And so you understand what services we have in the US.

So there are many people -- there are many different kinds of deaf people. And you see a whole list of who actually uses them. You can read them for yourself.

I'm sure I overlooked some. And you know there are a different variety of people who use the relay services. And that's also the reason why we have the different kinds of relay services. Because people all have different communication needs. They all have different kinds of communication behaviors and differences and then they can choose the kind that actually matches their needs. So if we can go on to the next slide, please.

So which user group is actually the largest? Well, you can see it here. Because people who can hear and who can speak, that's the biggest user group, as well. And I'll explain why. Because it's not only the deaf people and the speech impaired people. But, you know, if someone wants to call friends, if one deaf person makes -- can call 10 to 50 hearing people in a month and they can communicate with each other and I'm only one person but I can call many people. So this actually multiplies.

So that's also the point Karen was making, the cost of the

relay services need to be shared by everyone, by all. That means that all who use the relay services. It's not only the hard of hearing people. The deaf people. But everyone can call us, as well. And we can call them.

So it's both a two-way communication. So we need to share the cost.

And the other thing that's important to remember is that the individual needs -- may change their needs and communication needs. Their hearing may go down. They can depend on amplifiers for example and they need to switch to captioned telephone services and maybe they later move to text. So it's not the idea that you use that one system forever. This might change later.

And our preferences may change. We might have different reasons, also, to use different methods of calling. And there was one person I remember saying that maybe I can use IP text. And then have a printed copy later. And then I can have the choices what I can use at that moment, which is important to have.

Okay? And you can also see that everyone depends on the intervention really of the relay service so who relays the call?

You can have the communication assistant. You have a video relay interpreter, a VI. And you can -- you can interchange those, as well. But all together you would say that ethics and role apply to both the caption assistant and the video relay interpreter.

So the people -- the UN Convention on the Rights of Persons with Disabilities and -- recognizes the Rights of Persons with Disabilities to autonomy, independence and the freedom to make their own choices. And the UN Convention also stipulates that no person with disability shall be subjected to arbitrary -- shall not be subjected to arbitrary or unlawful interferences with his or her privacy.

So people who are deaf or hard of hearing or speech disabled are extremely dependent on these relay services to maintain their independence. And friendships and of course employability and to handle their personal affairs and also to make plans and address their needs retaining their health and wellness and be contributing members of society.

And this is equally true for every single person on the

other side of the relayed conversations.

Although relay services have reached a sophisticated level of development in the US, and some countries in Europe, there are still many countries where the service is non-existent.

The development you can see in the US and also in Europe have gone through different processes in establishing the current relay services.

And these relay services in the US are based on the Americans With Disabilities Act, the ADA. And a few relay services in Europe are based on the different and diverse national legal rules. And the regulations. And therefore, this presentation, we have divided in two parts. One is concerned about the relay service in America and one is about Europe. And sometimes there's different terminology being used in Europe and US for relay services.

In the US we talk about relay services when we mean to provide equal access to the telephone. And in which way the conversation is being relayed by the interpreter between the two parties who are each in a different place. And if we look at Europe, the term remote interpreting is also being used for that same concept of relay services. So both systems remote and relay have the same idea as confidentiality and privacy for the same situation, both systems.

So the purpose of this presentation is really to examine how relay services must be conducted to ensure privacy and confidentiality for consumers who depend on such service. And people who are deaf who use sign language interpreters have to come to understand and accept that interpreters conduct themselves according to professional standards that require confidentiality. And in the more developed relay service, this trust by consumers has transferred by similar expectations of confidentiality amongst communication systems.

And so the European forum of sign language interpreters, EFSLI has recently started investigating the relay services in the respective European countries. And the investigation is really to understand -- to carry out this online service with all of the national associations of sign language interpreters and individual members of EFSLI. And we can give you the preliminary findings.

And these are the first findings here on the slide. So



some of the countries like the UK, Finland, Germany, Sweden, Denmark, France, Czech Republic and pain they have the remote interpreting services established and some have established ad hoc services, interpreting services. So like at home, getting interpreting services.

For example in the Netherlands it happens.

And experience in Europe comes from this survey. And it shows that there's only a few that have experience in remote interpreting services. And only a few countries that have responded so far. And it's interesting that the topic -- that it has for each country they do not fully agree on how to be successful yet.

So 22% of the respondents received a special training to work as a remote sign language interpreter. It varied from 30 minutes to a maximum of two hours. -- two weeks; sorry.

And very few interpreters, only 9%, replied that they have a special professional code of conduct for working as a remote interpreter.

Even interpreters from the same nationality responded very differently to this question. They responded different to this question. Some said they had a different code of conduct. Others said they had not. And maybe the national association has established one or not.

But the business they work for might have. So interestingly the majority of respondents say that they do not think a special code for working as a remote interpreter is actually needed. In addition most respondents do not expect different ethical dilemmas when working as a remote interpreter. And only a few expect issues with confidentiality. Or issues related to the possibility that the interpreting can actually be video or audio taped. And that's then the question of confidentiality that they might expect that could arise. And if you look at the US, which is quite different, when we talk about communications assistants, which by implication it also includes sign language interpreters are commons of communication. And they are personally not involved in the conversations they don't personally interject comments or opinions. If I can have the next slide, please. The next one.

Okay. So in the US there is a national organization the R

ID the registry interpreters for the deaf and they have developed a code of conduct which is connected to the National Association for the Deaf. The NAD. And they have also a Code of Conduct and here you see the principles of the certified -- the principles the certified interpreter has to follow with the code of professional conduct. You can read them for yourself, please.

And I said before already the experience with sign language interpreters by consumers with the aspect to confidentiality can also be with -- carried across to communications assistants, as well. Probably the most important part of video interpreting is to -- when you get a call from a deaf person, you have the ability you don't know what your situation is. You don't know what the call is for. You don't know what the communication preference is. And you need to be satisfied with the different needs that are there. And satisfied also with what the communication system can offer.

And part of the practice is that what is also required by the FCC. And then the voice interpreters and the communication is they sense that the information that is happening that the idea that the call is being crossed from one number to the other, the information that's provided, like what was saying that the dial tone or busy signal or that there's no response or that a man's voice is entering and not a female voice.

So those points is important to know what is exactly happening. And also by remembering these things is that the locus of control is actually with both parties. So that the communication assistant let's both parties know what's happening. And that the communication assistant herself or himself is just the operator and is not controlling the conversation.

And if I think about the situation where the communication assistant is working in the US, the communication assistant is working in call centers with individual workstations. And these are separated by soundproof partitions so that communications assistants that are working next to them cannot hear what is happening so they cannot overhear the conversations happening in the next booth. You cannot hear what calls are happening next door.

And also the access to the work area and to the call

center it self has to be strictly controlled and secured. And video screens at each workstations cannot be seen by people who walk by the workstations.

And also the call centers should not permit communications assistants to carry pens or pencils or for example hand held PDAs when they work in that work area. Because the information is confidential and you must make sure it's not copied for example credit card numbers or personal information from other people. So they are not allowed to bring any writing materials in the work area. So that has to be away from the work area. They can keep that in a locker for example.

Although a few providers of relay services have considered setting up communications assistants to work from home, they don't really -- yeah, it's frowned upon by the relay users because of the immediate supervision and controls of confidentiality that are not there. Because you never know who can hear what's happening. And each communication system and video interpreter has a personal identification number. And at the beginning and at the end of each relay call that is given. So you never use a name. It's just a number of that operator that is given. And then later these might be used to for example file a complaint or of course a compliment. And so the names are never used. Only the numbers.

And in the US you also have an example of best practices. And one of the ones I wanted to show you is CRS, the California Relay Services. And in the US, each state administers their own relay services. And this one is administered by the California public utilities commission. Which oversees all telephone communications in the states. And California Relay Services is paid for by all telephone users in the state via a small monthly surcharge. And it's required that they have total confidentiality. So all calls made through CRS must be kept totally confidential and there's no written or electronic script. And if we look at the pledge of confidentiality as a relay provider you are required to sign a pledge of confidentiality promising not to disclose the identity of any callers or fellow relay communications assistants or any information.

>>BILL PECHY: Can you bring your remarks to a close, please, we are out of time.

>>JUDITH VIERA: So the operator cannot discuss any calls with other operators, as well. The content of that. So the confidentiality part makes it important that everyone -- that every deaf person, hearing person who requests a copy, they cannot have a copy. So it's all confidential. And -- so if there are any comments or questions, please let me know.

>>BILL PECHEY: Thank you very much, Judith.  
(Applause).

>>BILL PECHEY: Excellent. One question. And then we'll take a break. Okay thank you very much, everyone. We have overrun our scheduled time. But we have some flexibility. So I would suggest that we return here no later than 11:25. 11:25. We will start at 11:25. So take a few minutes. Don't forget to go up to see the demonstrations. And see you at 11:25.

(Break.)

>>FLORIS VAN NES: Sorry; we will resume the session. If you please can take your chairs.

And so we will continue with Session 3, our workshop here. And the first speaker is -- well, first is Mitsuji Matsumoto from University of Waseda the title of the talk is slightly mysterious but he will explain it F.790 and Guide 71. Mitsuji Matsumoto, please go ahead.

>>MITSUJI MATSUMOTO: Thank you, Mr. Chairman. Good morning, ladies and gentlemen, is that okay? No.

>>FLORIS VAN NES: Can everybody hear?

>>MITSUJI MATSUMOTO: Mic test. Hello? It's okay? No? My name is Mitsuji Matsumoto. From the Waseda University. It is a great honor to have the opportunity to present our work ITU 16 - - ITU Workshop on Accessibility. The title of my presentation is accessibility in telecommunication the significance of global standardization this outlines how standardization works from the accessibility guideline works in telecommunication. In particular developing the version of F.790 and related work we have done. So what is done in cooperation with Japanese manufacturers through the Japanese committee in communication access counselling (inaudible).

In my presentation this morning I intend to cover the following items so due to the time (inaudible).

As our work as a result of the special (inaudible) information communication technology, ICT, in particular the

expansion of the Internet, the ICT are more likely to have contact with the telecommunications equipment both in our business life and our daily life.

Due to the rapid aging of the population, the chance to (inaudible) persons with disabilities are having to use the telecommunication equipment and that is rapidly increasing.

For this reason it is important to ensure that persons with disabilities aren't restricted physically or communicative capabilities have equal access to telecommunication equipment and access.

In addition, the use of telecommunication equipment is not (inaudible) but across national -- moves across national boundaries to the global market and the users themselves move freely from one country to another. Thus, it is desirable to create an environment where telecommunication equipment and access can be (inaudible).

In order to keep pace with these changes -- keep pace with these changes in the marketplace and society, it is preferable for both consumer and suppliers to have telecommunication equipment and services that are accessible to both users. Accessibility is achieved by introducing universal design principle into the design and development process and driving to develop telecommunication equipment and services. That's user friendly for all.

I would like to mention about ISO/IEC activities particularly. And this picture is not -- please look at the picture, not the text.

The Guide 71 was developed in 2001 to provide guidance to writers of relevant international standards on how to take into account the needs of older persons and persons with disabilities.

However, even though the ISO/IEC (inaudible) accessibility it drive does not include clear specification regarding telecommunication equipment and services. Therefore, we believe that regulation in ITU-T is necessary. In this (inaudible) telecommunication accessibility. This explanation will be done by the next speaker, Mr. Sagawa will explain in more detail. So I will skip.

In ITU-T accessibility activities started over ten years ago just to mention just the big picture before regarding the

work on text telephones. This work was extended to a recommendation F.705 opinion total conversation and recommendation for V.18 for real-time text video and voice communication in one mainstream telecom service useful for all. Type, sign, show and talk. All in the same call. A total conversation.

So the main work was concentrated to audio videotelephony interface as a total conversation.

In the last study period, the work in Question 26 in Study Group 16 was expanded to develop a Telecommunication Accessibility Checklist for standards writers. And a recommendation F.790, telecommunications accessibility guidelines for older persons and persons with disabilities were developed.

In particular, the checklist was a guide of standards writers. So Study Group 16 has helped coordinate with other Study Groups to assure accessibility in new technologies such as next-generation network, NGN, home network and IPTV. Full standardization. (Inaudible) was fairly big in this field.

In the case of the accessibility guideline, the work was started in November of 2004. Through a lot of discussion shown in this slide, it was published in January 2007. And these activities I have a lot of experience in just the persons with disabilities discussion about just like this meeting. The next slide shows the common parts between the recommendation F.790 and article 9 of the United Convention on the Rights of Persons with Disabilities this Convention consists of 50 articles and additionally 18 articles. Article 9 is related to accessibilities as mentioned before. In this figure, I look at the common parts between ITU-T accessibility guidelines and Article 9 of the Convention. The left side is Article 9. And right side is Recommendation 790.

So in -- I think there is a common meeting between two recommendations and Convention.

So (inaudible) -- very similar meeting.

For example, the (inaudible) services open in Article 9 is mentioned and Recommendation 790 is also mentioned (inaudible).

(Speaker is inaudible).

>>MITSUJI MATSUMOTO: So both of them are similar. The process for recommendation specific for standardization in ITU

(inaudible) the standard process in principle I think the following points can be considered in telecommunication services and (inaudible) are interrelated assisting in collaboration with network. That network function cannot be easily changed after implementation, after standardization.

In order to include accessibility requirements in the network, it is important to input them during the network development stage for the whole standardization. The current checklist for standards writers is very important before standard in order to include accessibility deployment in (inaudible) clearly accessibility checklist (inaudible) could be also variable and useful.

So this slide shows the current status of the position of the telecommunication accessibility guideline. This was developed reflecting from the many opinions the portion of the checklist or the standard is just before the standard process. In order to input the requirement from the person with disabilities. However, when the standard was accomplished, manufacturers developed their products using recommendation only. It is difficult to reflect the accessibility requirement for users needs. Therefore, I think we should offer the accessibility checklist for manufacturers.

Just like this. I think accessibility check is what I want to see. So the second checklist is more detailed description would be necessary I think the checklist for manufacturer would be easy and helpful to their implementation of the standard communications.

Accessibility will not be realized by manufacturers. This is kind of an -- this is a kind of infrastructure (inaudible). Therefore, it needs strong support or promotion by the Government of each country. It's important -- the Government needs to support the accessibility promotion.

In this regard I have actually introduced (inaudible).

As I mentioned before in Japan the communication access Council plays an active role as a sector.

Now, facilitator in promoting easy access to telecommunication equipment and services. Or in other words assuring and including telecommunication accessibility.

The Council Members include the representatives from -- this represents as a picture, not a text. The telecommunication

and network association in Japan and the telecommunication carrier association, the (inaudible) industries and business oversees various technologies and application. And (inaudible) users --

(Speaker is inaudible).

>> This is consistent with the Japanese federation of the deaf and the Japan association of the hard of hearing people. Japan (inaudible) disability group. Japan federation (inaudible). Japanese society of telecommunication of persons with disabilities. And Japan Council of disabilities (inaudible). Many persons with disabilities are present on this Council.

So in these activities is the telecommunications access Council develops the recommendation for Japan and also international activities and national activities, the current international activities is related to Question 26 of telecommunications accessibility guidelines.

Okay. This is a case study of the activities in (inaudible) telecommunications access Council (inaudible).

(Speaker is inaudible).

>>MITSUJI MATSUMOTO: And the next is administration activities. The direction of the activities by the ministry of the internal affairs and communications in Japan. So this is related to promote ICT utilization (inaudible) users based on universal design. For this purpose. The MIC is mainly two parts it promotes and -- promote universality of the user environment and the second is support for individual needs.

In the case of the promote universality of the user environment, they are also handling the (inaudible) to ensure accessibility in information communications. In particular they developed and disseminate guidelines of information communication. Devices and web contents. And second one ensure accessibility of local public bodies to web content.

They also ensure accessibility in broadcasting. It is handling the captioned and narrated broadcasts.

The second issue is handling the support of the individual needs. This is also handling the two parts. Promotes the spread of devices and services that meet individual needs. The second one is promotes support that meets individual needs.

So the next -- next I would like to briefly introduce the



accessibility tel communication programs in Japan. It's (inaudible) briefly introduce.

The first one is (inaudible) and also (inaudible). Allows the function (inaudible).

(Speaker is inaudible).

>> The picture is the emergency code. A simple emergency notification devices in which the person notifies a preregistered number including a free speaker phone.

The next example is a relay service making a phone call on behalf of the person with disabilities when the person with disabilities wants to communicate with a hospital, or communicate with a restaurant to order. So they need the relay center first. Then to communicate.

And this is part of the (inaudible). The one thing is the slow speak, it slows down the speech of the caller's speech without changing the pitch.

The last one is a facsimile to cell phone handsets. Persons with hearing disabilities can send emergency message from their home facsimiles to cell phone handsets of friends or family members who are out of their homes without any understanding of the Internet access. The emergency message will be (inaudible) cell phone.

So in conclusion, the -- I mentioned about the history of the accessibility guideline on Council's work. And also I mentioned about the Japanese activities in this regard. And also accessibility checklist and guidelines are very important for promoting accessibility for persons with disabilities. In order to provide its telecommunication accessibility documentation, ITU-T should proceed to develop another -- and publish an accessibility checklist of manufacturers. Products guidelines.

And the last one the accessibility cannot be realized by only one manufacturer. It's something like an infrastructure. Very big issue. Therefore, Government should push the network providers who are the voice manufacturers to support the accessibility guideline Government plays a very key role in promoting possible be and regulation with policies and regulations and foster accessibilities. That's my talk. Thank you, Mr. Chairman.

(Applause).

>>FLORIS VAN NES: Thank you very much, professor Matsumoto. We have time for one or two questions. Mr. Jones. Okay.

>> I think this is extremely interesting and very important. What you're talking about. What's important is that the manufacturers themselves can look at the checklist to make sure that they understand everything. For example, Nokia, there's one model where they have built in an inductive coupler for hard of hearing people. And that is supported by FCC. In America. And they said that they must include that.

And that they might have two models per phone company. But in Europe there's no regulation for this. Yet the same mobile phone in Europe have taken the inductive coupler out.

So I think this is really important that we make sure that the regulators all over the world are working towards the same standard and understand this. And that we should -- and they should play their role to promote accessibility with regard to the equipment and how it's manufactured. So we really need to think carefully but -- about how we're going to work towards what you're talking about. And what you've done so far is extremely impressive.

>>MITSUJI MATSUMOTO: Thank you very much for your kind comments. We're very happy. And as I mentioned before just to indicate the future work (inaudible) --

(Speaker is inaudible).

>>MITSUJI MATSUMOTO: Stage the accessibility checklist here and the (inaudible).

(Speaker is inaudible).

>>MITSUJI MATSUMOTO: The standardization to include their equipment because of -- for persons with disabilities here. And after the transition (inaudible).

So far (inaudible). (Off microphone).

Accessibility checklist here after the recommendation in order (inaudible).

Involving the checklist involving the (inaudible) from the persons with disabilities. Then I think (inaudible).

(Speaker is inaudible).

>>MITSUJI MATSUMOTO: So the accessibility checklist is for standard (inaudible).

>>FLORIS VAN NES: Maybe it is possible to have a private communication afterwards. Is there another question? No.

Okay. If there is not, I would like to thank again professor Matsumoto. And I would like now to announce the next speaker being Dr. Ken Sagawa, who is from AIST and that's the National Institute of Advanced Industrial Science and Technology. And among other places in Japan. And Cuba. And at the moment things are being changed there. And in a few seconds, Dr. Sagawa will start his talk.

>>KEN SAGAWA: Okay. Thank you.

>>FLORIS VAN NES: There's no speech yet. They are starting up. Nothing is said yet.

>>KEN SAGAWA: Thank you very much. I'm very glad to have a chance to talk about my activities concerning accessibility. My name is Ken Sagawa. I'm from National Institute of Advanced Industrial Science and Technology it is called AIST in Japan. And I'm scientifically searching on human vision and with special interest on aging and the effects of aging and disabilities. That's why I'm being involved in this accessibility.

So our goal is to develop standards concerning accessibility on the basis of our research results. And today I would like to show you some of our activities which we are working in ISO/IEC.

So let me start with what is accessible design. Maybe as all of you know already. But in Guide 71 it is described as something like this. Extending standard design to people with special requirements. Special requirements meaning older persons and persons with disabilities. To maximize the number of potential users. This is written in Guide 71. And most important point is to maximize the number of potential users. That's the most important point in accessible design.

Well, we have a lot of industry products in our daily life. But all of them are not always easy to be used by people with some forms of limitation.

For example, when we see -- instructions are usually in small letters. And they are not easy to read for all persons -- for an older person whose visual acuity is getting worse with aging.

And also if we go to have a Braille usually in this. So it is not usable for all people with visual disabilities.

So if we enlarge the font size or if we put the

(inaudible) on the instruction, it can be useful for all people who are people with disabilities of something like visual disabilities. So that means an increase of users. So accessible design -- the heart of accessible design is to use some idea to expand the users of the products. That's accessible design.

Well, the ISO/IEC Guide 71, there are -- this is very nice guidance. And our work started with this Guide 71. Guide 71 has pointed out some factors we have to consider in accessible design.

For example, contrast and it could be language, drawings. Or we should have to -- we have to take count when we make -- we have to take into account when we make into accessible design. But Guide 71 didn't say how to design or how to (inaudible). Then we need some knowledge to solve those problems.

I will show you some examples.

This is an example which is alternative format. This is very important concept to accessible design.

In this case, alternative means individual information to be replaced by tactile -- visual information to be replaced by tactile information. This is a sample in Japanese -- this is prepaid cards that has different (inaudible) for three different cards. For example round shape for telephone cards. And triangle shape for transportation. And rectangular shape for shopping.

So the blind person can easily discriminate by touching these notches what's kind of the card they have. And position is defined in standards so the blind person can also know how to insert this card into the machine.

So this is an example of visual information being replaced by tactile information. And there's another example of a container and that's dish bottle and shampoo. They are exactly the same shape. So the people with -- a blind person cannot understand which one is which. So the Japanese standard puts the tactile marking -- in the Japanese standard, we put the tactile marking on the side of the shampoo bottle not for the -- this bottle so this is easily discriminated by touching. And also milk container has a notch. So the people with visual disabilities can easily understand what the different container by touching these notches. And this notch is on the side --

opposite side of the opening position. So they can also know which is the opening position.

So this is one example, a really important example of alternative format. And the other example is we need some knowledge this is an example for auditory signals which can be used for electrical appliances of many kinds. For example an iron or a toaster, they have a warning for a termination and feedback sound we have surveyed what kind of frequency and what kind of sound is you'd for auditory signals. But they used the whole (inaudible) for all of the signals. And from 30 dBs to 70 dBs.

When we brought our hearing threshold on this graph this is the threshold for younger people and under this area this can occur. And however this list is, the sound can be heard. So most of the 4,000 auditory signals can be heard for younger people. But our threshold goes up when we get older. So this is the threshold for 65 to 74 years old.

So most of the -- well, all of the signals cannot be heard by all of the people of this age. And that situation is getting worse.

And this situation is getting worse when we get older. Because our hearing threshold is getting higher and higher. And when we get 85 years old, most of the 4,000 auditory signals is not audible.

So we have to solve this problem by shifting the frequency or getting up the sound pressure.

Well, such kind of information we are correcting now. And to make ISO/TR 22411. The first one was already published in 2008. This is a correction of ergonomic data and design considerations for data and guidelines for the application of ISO/IEC and this was done by working group 2. I'm within this working group. And the contents of the TR 22411, I'll show you some examples of tactile discrimination I already mentioned and working memory and attention for these individuals and legible font size this is important and color combinations and useful visual field and signals and this has some community aspect with our abilities.

So this is the information for accessible design and contained in TR 22411. But it's not exhaustive yet. We should cover all of the human tasks. So we're not trying to make a

second addition of the TR which would be completed within a few years. This is an example of the new medical expectation of the disability. This is -- when we get older the blue light is less sensitive. So this sign, the standard sign is not visible to all. So this is caused by our sensitivity for light as we get older. So we can estimate the contrast of this sign by referring to this kind of economic data. We calculated for younger people 34%. It's a very high contrast for younger people. But same sign is calculated for 6%. Of persons in 70s. That is very, very difficult to see. Now I would like to show you the structure which we are working on with accessibility. Sorry this is (inaudible). TC 159 has five groups. One working group and four subcommittees. And they have their own accessibility issues. Working group 2 is responsible for do you feel TR and they are bringing in ergonomic data and technical guide. And SC1 is working on principles and terminology. So accessibility, what it means. We are discussing. We are having a very positive discussion. And SC3 is anthropometry and biomechanics and they are interested in step height and reach range and SC4 is interested in ergonomics of human-system interaction of software accessibility and tactile markings and SC5 this is for ergonomics of physical environment they are concerned with auditory signals -- they work with accessible design so to harmonize all of these activities we have the TC 159 group and through this function we have some connection with TCs outside of TC159 or international disability parties.

Now, let me -- well, this is the final slide. Let me introduce you to our activities concerning the connections to disability organizations.

When we develop accessible design standard it's very important to share the voices of the different organizations. And there are about 10 or 11 disability organizations at least in the United Nations for example World Federation of the Deaf and world blind union. And all of these are very important for us to hear their voices. What they are -- well, what they -- the inconveniences they have in their daily life and what we have to solve in our standardization.

So we are keeping in close touch to these disability organizations when we develop accessible design standards or

when we have reports on accessible design. I think that's all I have to say now. Thank you very much.

(Applause).

>>FLORIS VAN NES: Thank you very much, Dr. Sagawa for your interesting presentation. Who would like to ask a question yes, there's a question. Yes, please go ahead.

>>RUTH MEYERS: Ruth Meyers from the TAG. I find this very interesting. I have one query about this one most of the access related to particular disabilities now I have quite a lot of equipment in my house which says listen to the beep. I can't hear the beep. I would like to have an insurance that if we recognize that there are some ways of -- found of making it a signal available for deaf people.

>>FLORIS VAN NES: Can you answer that, please.

>>KEN SAGAWA: Sorry; I can't hear very well. You mean that disability issues should be more emphasized.

>>FLORIS VAN NES: Perhaps I can help. Yes, the question was a lot of what you have been referring to has been focusing on people with visual disabilities but as a deaf person, I need to know if there is going to be some kind of visual prompt as a deaf person would there be a visual prompt for these appliances as the focus of what you're talking about seems to do with people with visual disabilities and impairments.

>>KEN SAGAWA: Well, we are working not only for visual disabilities. We have a lot of expertise in our working group. And myself I'm a visual scientist so I mentioned mostly the visual issues but my colleague is working on physical disability or communicative disabilities. And they are doing some research on them. So the scientific knowledge can be put into our second edition of our work.

>>FLORIS VAN NES: Yes, there's another question from Mr. Hellstrom.

>> I think what you first referred to as the need for multiple ways to convey the same information. But that's the next step. That's the accessibility guideline. But you have researched for the visual part which is important to give that as good visibility as possible. But then also give the audio and tactile. So for the product you need all three usually for all kinds of information.

>>KEN SAGAWA: Yes, we are working not only for visual.

Tactile is also very important aspect of our ability to make alternative formats to be getting this information to tactile I think that information is very important to replace the hearing information.

So on that kind of research we are also working on hard.

>>FLORIS VAN NES: Okay. Thank you very much. In the interest of time, I would like to propose now to go to the last paper from Section 3, which is called accessibility standards and their design of procurement. This paper is from Loic Martinez. And Clas Thoren called "Conformity Assessment in the Public Procurement of Accessible ICT". And we will have to wait a few seconds before -- no, you have set up everything. Okay. Go ahead, please.

>>LOIC MARTINEZ: Thank you, my name is Loic Martinez I'm from Spain I'm from the University of Madrid. Does this sound okay? I'm pretty sure that that works.

With me is Clas Thoren from Sweden. We will present it together. We will present the first part of the presentation. And then we'll answer any questions.

So this is an overview of the contents we have in accessibility and procurement and talk about the reports we made for the European Commission last year and then how we analyze types of conformity assessment systems and schemes as they exist and how we are a supporter of the integration.

So instead of going into a very long overview, I'm just (inaudible).

So in this work we're thinking about using public procurement as a tool to improve accessibility. And in Europe we're trying to follow the example of (inaudible) of having the community in the states so there was a mandate issued by the European Commission to the European standardization (inaudible) to work on functional accessibility requirements from ICT. And checking about this and Phase 1 had two reports the first was developed by ETSI and this was to work (inaudible).

And the second report was centered especially on conform knit assessment. And that is to verify that the products are really confirmed with the accessibility requirements. One was developed by a project team, a team of experts. We have experts from Spain, from Germany, from the Netherlands. And we have a couple (inaudible).



(Speaker is inaudible).

>> Clas was the project leader of the team and (inaudible) was a leader in the experts of the team.

Just to center the presentation I'll just provide a couple of different definitions of what conformity assessment means. It's a demonstration that specifies requirements relating to a product, process, system, person or body are fulfilled. And one -- we have conformity of assessment systems. We define a set of rules, procedures and management for carrying out this conformity assessment. And then if you just go more to the table you can find out about conformity assessment scheme it's applying conformity assessment system related to specified objects to which the same specified requirements rules and procedures apply. Our approach was for search for existing schemes and systems. And try to analyze them. And define so properties and schemes of analyzing them called dimensions and then we describe what the schemes were found between those dimensions.

Then on the other side we also define some properties of a model to analyze a public procurement context which is called the criteria. And then we work across this criteria information to see which are the best hypothetical scenarios and recommend values for those dimensions. In the European Commission we did so for four scenarios and in this presentation I'll just speak about one of them.

For the final recommendations that we were to analyze one particular scheme or system, we based the function and mod -- the functional model on the fulfillment system (inaudible).

In this the conformity assessment standards are for selection where you select which parts of the products or systems you are going to be analyzed and which of the requirements you are going to test and which are going to be the methods that demand a result.

The second phase of the function is called determination where you are testing for information on fulfillment of specified requirements to check whether the product or system fulfills the requirements. The third section is called review and attestation review the results and take that and produce another session where this product or service (inaudible) requirements.

And in some cases we have a fourth function which is called surveillance and there are some typical cases in which products involve this like a web site so you can have surveillance and we do the conformity assessment several times.

So we identify some dimensions for these four functions and additionally also one more (inaudible). We have the selection. The -- if the dimension is an international or national or European standard. Non-official standard. We also talk about this -- can it be in a particular scheme or system (inaudible).

Concerning determination which we talk about different methods of determination the methods are infection for example looking into your (inaudible) or testing performing these tasks. And we also try to connect whether the determination was done outside of the (inaudible) provided. So in that case, which type of party it is -- we check up on the third parties.

Concern the review and attestation. This we mentioned is a type of (inaudible) attestation. The second is the detail provided and we have a conformity assessment and typically it's enough to just say yes this product conforms to the requirements but (inaudible) try to assess here. And whether the results of the performance (inaudible) concerning the surveillance we analyze whether this has existed or not and whether it was (inaudible).

(Speaker is inaudible).

>> If there's a way for these people to tell (inaudible). And the other is whether this scheme or system is (inaudible). There's some -- very few examples. (Inaudible). Mandatory (inaudible). So this is one thing (inaudible).

Concerning the type of parties, we use a couple of classifications one -- more typical one is the differentiation between first, second and third party. First party is the party using the product or solution. The second is the person or organization that has a user interest in the object. And the third party is a person who is not a producer, not a consumer. Typically should be (inaudible).

Concerning the dependence of the parties is another ISO standard that requires three types, type A, through the independent body which is not link today a party directly involved in the design of accessibility and we will not do any

training of developing that type of technology and type B is -- sorry; screen.

Right. So Type B organization is separate and identical part of an organization and it only works with -- it has no relationship with (inaudible).

(Speaker is inaudible).

>> Or they are part of a -- body supplying infection services only to their parent organization and type C is anybody that is involved in the design manufacture supply they are producing the same types of products and they (inaudible).

Concerning our analysis of the existing systems and schemes which you can find in the report, you have in the web site you have this paper with more details. And even though you also have in this paper a link to the reports. So we analyze three types of systems or schemes one for the general ones as defined by international and European standards. The second ones are ones that are for ICT accessibility. And then we found in most of the web sites and most of them were done by these non-dependent third parties but we had lots of variation really independent third party classification (inaudible). Voluntary, first and second (inaudible).

We also analyzed from assessment systems (inaudible) to find more information.

(Speaker is inaudible) awe a.

>> Concerning our model for organizing the product (inaudible) we have the properties for the product to be procured (inaudible) so I'm not going to go into more details here, not a lot of details. We don't have the time. So different properties describing the criteria whether the product takes a very long time to develop. Whether the product is in the market. Whether the market there's additional (inaudible) developing these products and services. In the case of the (inaudible). Physical harm and whether it's (inaudible) which is a part of the risks and (inaudible) if the product is not accessible in the case of (inaudible).

(Speaker is inaudible).

>> So then we develop four scenarios. The goal for them was to show how we could use the information together to try to decide what is the best schemes and systems. So we have four scenarios set units of desktop laser printers, frame contract

for mobile communications, development of a web site, road traffic management system. For each scenario we have a description of the scenario, the values assigned to the area, recommended values of dimensions and if possible we also recommended conformity assessment system for these scenarios. Just because we are here in ITU the telecommunication example is that we have local authority you need 200 to 250 employees. If you want to substitute the fixed telephone system then we'll track both the wide communication services and some terminals by phones.

So concerning the material for the criteria the type of product is the service plus the hardware. Time to market is very short. The risk of social exclusion is very high. If you have (inaudible) services is not accessible (inaudible).

So we identify some potential values for dimensions. Like for instance the requirements are not international (inaudible) that exist already. We have the requirements (inaudible). The type of party because the standards are (inaudible).

(Speaker is inaudible).

>> And the final communication in this particular case was just (inaudible).

Now (inaudible).

>>FLORIS VAN NES: Thank you very much, Loic, hi, are you hearing me? No one says no.

>> As Loic has described right now, we tried to create a map over the world of conformity assessment systems and schemes. And we also provided a way of navigating on that map. But we also will draw some conclusions. One conclusion is that it's really unlikely that only one conformity assessment scheme or system could be applied across all kinds of situations. And the main reason for that is that procurement of information technology is a very complex process. With many variants. For example, procurement of the shelf products is different from procuring development or innovative products or services.

Procuring products is different from procuring services. Procuring for internal use in the contracting authority is different from procuring for -- where the users are citizens and are known to the procuring organizations. Accessibility may be more or less crucial in procurement. For example, it's very important where the product has user interface but maybe less

important where there is no user interface.

The procurement legislation in the European community is very complex and also makes restrictions for the procuring organization. It's necessary to -- it's mandatory to refer to standards. Which means that you cannot refer to a conformity assessment scheme which is not a standard.

However, the assessment of conformity to specified requirements, this is a very crucial element of the evaluation of tenders. And the contracting authority is not allowed to stage requirements which they are not able to verify that they are complied to.

We have finished Phase 1 in the mandate -- mandated work. The project team which Loic and I were modeled is now dismissed. A new work is going to start hopefully within the near future. And that is Phase 2 of the mandated work.

Phase 2 has two parts. One is to produce a standard with accessibility requirements. Another part is to develop support and guidance material to assist procurers in taking accessibility into account in their procurements. There will be new project teams, new work. Discussions is now going on in the European Commission and in the European standardization organizations to form the work.

Our project team was asked to give some recommendations for the future work. Where are they -- thank you.

One is to formulate requirements -- the accessibility requirements must be clear and unambiguous and formulate them so that they can be verified. This is according to a standard guide. Guide 7. Which probably will be replaced by standard of 17007.

Another recommendation is to supplement those requirements with methods of how to verify that they are compliant. And the third recommendation is that for some criteria, levels of accessibility could be envisaged. For example, if you are to set requirements on the suppliers capacity and ability as regards to accessibility. It could be a good way to have a maturity scale to place where the supplier is located on that scale.

We have some other recommendations which are not placed on the slide here. Specifying criteria for good supplier capacity and accessibility. Such as which kind of organization. Which

kind of skills are needed without a need for a policy or competency and the supplier.

We had one idea on the making and accessibility management system. Just like there are management systems for environments and information security.

We have a clear message from the industry that they did not want a specific accessibility management system. Instead, they wanted to deal with accessibility within the framework of their ordinary management systems. So one recommendation from us then was to explore the possibility of including an ICT accessibility management system into existing management systems standards such as ISO 9,000 and ISO 42,000. And another -- my last example here is that it should be assured that as much as possible, the standard and the guidance material should be consistent with current and future business models and procurement strategies.

Now, that leaves us to the final slide which says: Thank you for listening.

(Applause).

>>FLORIS VAN NES: Thank you, gentlemen, for your dual presentation. Who would like to ask a question. Mr. Gunn.

>>GUNNAR HELLSTROM, please?

I need to protest against one thing that Clas said. He said things without user interface has no accessibility implications. That's definitely very wrong. And procurers must think on accessibility for everything they buy. Even the router or fire board confirm severe accessibility influence they can destroy video. They can even stop the video screen they can stop the video quality they can stop the text screen in telecom systems. So everything needs -- have accessibility implications, do you agree?

>> I foresee that. So I think -- no, I know I included the word may be less important. But I did not emphasize sufficiently the word may.

>>FLORIS VAN NES: Well that was an easy one. Is there another question? I guess people are getting hungry. So we will -- there's another question then? Yes, one more question.

>> Hi, I'm Dean Humphreys from Sign Now. Congratulations on your -- congratulations on your presentation. Where did you get the funding from for the work that you're doing?

>> It's fully funded by the European Commission. It is a mandated work.

>>FLORIS VAN NES: Okay. That was an easy one again. Is there another question? Now finally the hunger won. So we will resume for lunch now. And I think in accordance with the other Chairman I'm going to ask you to come back at 2:00 o'clock. It's more than an hour for lunch. It should be sufficient. Let's give a final hand for all of the speakers this morning thank you for your attention and also for the questions you have asked.

(Applause).

>>BILL PECHEY: Don't forget the exhibition on the second floor.

(Session ended at 5:48 a.m. CST)

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