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     >> IMMACULADA PLACENCIA-PORRERO: Okay. Hello. Can I ask
the speakers of this session 2 to come on to the podium. I'm
asking for Jorge who is also here, Sigrid. There was a change of
plans. Francesca is coming and we have Jutta on the remote.
     >> JUTTA TREVIRANUS: Hi it is Jutta.
     >> IMMACULADA PLACENCIA-PORRERO: Before we start the
session we are going to watch a video message that we have been
very honored in the previous session to have Laszlo Lovasky who
is a member of the CRPD. They receive the country reports and
they hold the interactive dialogue. So Laszlo has unfortunately
as it was said by Jaroslaw said this morning he has not been
able to finally join us because of weather problems. I will ask
to start with the video of Laszlo Lovasky. Thank you.
     >> LASZLO LOVASKY: That can eliminate any kind of
disability in the near future, even though we are not there yet.
To continue let's talk about the UNCRPD Convention and its

environment. Even though the Convention, the framework tool accessibility, the backbone of the Convention, in terms of equal access and reasonable accommodation. That is why we have developed at least three specific general comments about accessibility in light of technologies. One on accessibility in general, one on accessibility in education, improving education and one regarding accessibility of independent living. Let's consider three aspects of these recommendations. I usually refer in line with the text on the Convention of the Rights of Persons with Disabilities.

First, failure to provide reasonable accommodation is considered to be discrimination under disability. Question one, what technological innovation and invention can be mentioned in the field of education, health care and environment and independent living in particular. Second, the development of community-based services.

Question 2, what can be achieved in terms of digitalized recording of the needs and provision and combination of services and monitoring? Third, equality, different role by enforcing the supported decision making. Question 3, can the use of Artificial Intelligence and deployment be emerging as an impartial and support to place guardians in some areas. When talking about technological advancement we have to recognize the importance of clear activity and the roles of sides of different markets and the relevance of health and IP industries as well. Technological innovation must serve the entrants of all society. We must rely on clear principles and (inaudible) proper legislation.

In order to be able to serve the targets and directions for me further research regarding the state of art technology, it markets as most influential players in terms of planning, production, and consumption in order not to leave the disabilities or anybody behind. However, as I usually point out the current disruptive technologies can lead to a kind of road for regarding the European Union's approach towards human workforce and the beginning of (inaudible) and services, accelerated automation. Therefore, in the long run a paradigm shift in the earlier disability related policies are inevitable since the social sector, we involve qualified workers. Why? Because we are using more and more tangent wearable devices as assistive technologies, getting better and fine-tuned individualized immersive devices, for example, in plans. More and more solutions are -- the myriad of Artificial Intelligence solutions are getting smarter and more independent and autonomous, not to mention the possibilities of the so-called 5G technologies in the near future.

And finally, in the near future, too, as studies indicate, science may be able to collect more than 10,000 disabling genes.

It might lead to an improved person in terms of social. For example, without modern technology in the field of aids or captioning I would not be able to deliver this presentation today. When talking about society and social innovation, first we have to understand the meaning and understand the roles of different social interventions, culture, identities, customs, et cetera. When talking about selection and distribution mechanism we also have to understand who are the key players. If we talk about social connection, we have to recognize the importance of freedom and cooperation as well as the role of coercion in terms of (inaudible). And sometimes it means real dilemmas in implementing the Convention. Because we have managed to acquire much value from both of society taking in to account the needs of Persons with Disabilities by improving the so-called mind mapping process, not only for their own sakes but also all other people's sakes. From parents to children with disabilities to people who are not disabled today, most of them they surely have disability in the future.

It means new narrative and paradigm shifts as well. We have to acquire the ability of social future. Please look around in this room. Have you noticed any enigma? Big wide (inaudible) action. An invisible one. Many of the I.D.s and paradigms are white elephants in the room. And been a clean box. Why? Because it means that we have to consider the issue of demographic of and future employment and Artificial Intelligence. Why this paradigm shift is important or not? It means a new paradigm shift using cars instead of horses. I also assume that different countries will have different approaches because people have different trainings and means based on their cultures and customs. In Asia, attitudes towards robotics and digital invasion. Point to climate, when it come to the employment of different educated people with different (inaudible) and compatibilities. Technology may change everything. As a famous Hungarian scientist said the science of today is the technology of tomorrow. Thank you for your kind attention and have a fruitful event today.

        >> IMMACULADA PLACENCIA-PORRERO: Okay. Thank you. We have now finished with this morning's session. So we are running a little bit late in the schedule. But we will keep the one hour for this session. Now this session is a very rich one with examples from several areas on the world on what's happening on accessibility in the area of ICT in policies and legislation. We will have one example from the European Union, Portugal. We will have two examples of two European countries which are outside the European Union but in different relations with the union. We will have Bosnia Herzegovina and Norway -- sorry, the other way around. So two different European countries. And we will have

also a country which is starting a very exciting moment with developing new accessibility legislation at a national level, that's Canada. And we will have also a very interesting presentation making some comparisons on where the different countries are in the European region and maybe even giving -- getting this global perspective.

   So without more delay we are going to change the agenda to give the first intervention to Jutta Teviranus. Jutta is the director of Inclusive Design Research Centre at the University in Toronto. She has been really a pioneer on accessibility having a lot of developments in the area of web accessibility also. And she is going to tell us about what is happening in Canada, if the connection works well. Otherwise we will pass her to the last position and start with Jorge. But let's try with Jutta. Let's hope it works.

      >> JUTTA TREVIRANUS: Hi. It is Jutta. And thank you for accommodating my inability to travel at this point. I'm hoping that the technology will work as was suggested by your prior speaker. And I will be talking about what is some of the exciting things that are happening here in Canada.

   I am going to start sharing my slides and if you could acknowledge that the slides are showing up.

      >> IMMACULADA PLACENCIA-PORRERO: They were. They have disappeared now. They are back. We have your slides. The first slide is there.

      >> JUTTA TREVIRANUS: Great. So what I would like to talk about today is some of the progress that we're making here in Canada with respect to technology and access for people with disabilities or digital equity. And as you intimated there are a number of -- there is progress both at the federal and at the provincial level. Just to give a little bit of context, Canada is a country of approximately 37 million people. And we are divided in to 12 Provinces and territories. And many of the critical services such as health and education are actually within the jurisdiction of the Provinces. To date at a federal or national level we have had a number of legal instruments to protect the rights of people disabilities, these include the Canadian charter of rights and freedoms, the Canadian Human Rights Act, the Employment Equity Act and as of lately there has been traveling through the various legislative processes a new Accessible Canada Act. And this has now passed the House of Commons and is on its way to the Senate.

   It is modeled on a number of legislative frameworks that we have had within the Provinces. More specifically the accessibility for Ontarians with Disabilities Act. Prior to the AODA being passed, the responsibility and the role of pursuing legal action was -- fell on the individuals with disabilities.

With the AODA the responsibility was shifted to the Provinces. So the individual that was wronged with respect to their rights did not have to pursue legal action. It was the responsibility of the Province to treat accessibility noncompliance similar to public health or environmental breaches of law. The AODA has been enacted since 2005 with a set of standards including a standard on information and communication. It is presently undergoing a refresh. And there are new approaches that are being considered by the Province of Ontario. The Province of Ontario has led the way but other Provinces are now also enacting provincial legislation, including accessibility for Manitobans Act, the Nova Scotia Accessibility Act and other Provinces are following suit.

The other fairly interesting news is that Canada has also agreed this year to sign the Optional Protocol of the CRPD. One of the considerations that Canada is engaging in both at a provincial and at a federal level is to look more at the entire ecosystem or the accessibility ecosystem and take a more systemic view to the issue of accessibility to ICT involving not just the legislative body and the organizations that need to comply, but also looking at how can we engage companies innovating in accessibility and have a more direct role with respect to people with disabilities.

So the -- at both the federal and the provincial level we are looking at an ecosystem approach. Some of the concerns that we hope to address with this are to keep pace with technical innovation. Legislation is very slow. Innovation travels far more quickly with respect to the legislation and what this causes is a mismatch with respect to the speed of legislation to address barriers that emerge but also opportunities that emerge in technology.

It has become quite clear that we need to act proactively if we are to ensure that emerging technologies are going to be designed inclusively. If not, then there is the risk of lock in of new barriers and the propagation and morphing of barriers that cannot be retrofit. The issue of intraoperability and the need for alternative access systems has also come to the forefront where segregated approach with respect to assistive technology acting as the bridge for access for people with disabilities is seen as an unattenable approach. Needs to be integrated.

The lack of an integrated approach has resulted in an inequitable cost of participation and escalating digital disparity. One of the areas that has gained quite a bit of focus is the emergence of the data driven society with smart systems, with Artificial Intelligence, with evidence-based governance and Government using data to make decisions regarding funding and

decisions regarding what programs are being invested in. The issue of individuals with disabilities, in fact, being outliers and highly distributed outliers with no homologous datasets being available for individuals with disabilities. If you were to take any population and plot it on a multi-variant scatter plot you would see that people with disabilities are at the edges or outliers within that scatter plot.

So what happens within our society is that the designs are not likely to be made for them products are decreasing in availability, reliability, interoperability, functionality, but increasing in cost. Knowledge, truth and evidence used for political decision making, marketing and all other areas are often not available because of the lack of homogeneity of individuals with disability. This has an impact on education and work and also on our Democratic decision making as majority rules.

So what we are doing within Canada and within the Provinces is looking at how we can keep pace with the technical innovation and address the issue of evidence and Artificial Intelligence and smart systems with respect to individuals with disabilities. We are also attempting to address the precarity of political support by investigating things like sustainably funded arm's length authorities with the powers to implement proactive process. And the powers to update the technical criteria and approve innovative approaches with respect to legislation and with respect to complying to the legislation.

This -- these arm's length bodies or authorities would have the responsibility to provide the tools and resources so that organizations can comply with our legislation. In general what we are investigating is an emphasis on culture, change, community processes, and community investment and participation in this accessibility ecosystem where attempting to construct. We are hoping to reduce the fragmentation of resources, tools and approaches and reduce the redundant effort so that the human capacity we do have to address the needs of people with disabilities is pooled and shared amongst the various parties and stakeholders that need to address the gap that currently exists in the disparity with respect to digital access for people with disabilities. We are investigating platforms and other mechanisms to harness the community effort and also to harness the feedback and supports that come from the entire population or community. And we are thereby pooling and refining the necessary tools and resources as well.

And thank you again for allowing me to participate in this way. I would love to continue the conversation. I have in my last slide I'm presenting some links to some of the discussions that we are having with respect to alternative frameworks and

ways of creating this larger ecosystem. Thank you.
   (Applause.)
      >> IMMACULADA PLACENCIA-PORRERO: Thank you very much. The
technology worked fabulous. And thanks also for keeping to the
time. Jutta will be available -- you will remain with us and
towards the end of the session I hope we will have time for
questions. But if she would not be there, you will be able to
address the questions directly to her per e-mail following the
link that she provided.
   So now we continue with our agenda. We go to the next
presentation, and it is my pleasure to introduce Jorge
Fernandes. He is coming from Portugal and he works in the
Ministry of Education and Science. And he is the head of the
unit on the information society department. And he is going to
present to us what Portugal is doing in terms of accessibility
in ICT. He has been engaged for many years. We know each other
from the '90s even when he was doing research on this subject.
Now we have a complete policy being developed. Please go ahead
with your presentation.
      >> JORGE FERNANDES: I think -- okay. Thank you very much.
First of all, thank you for the invitation Portugal to this
event. It is a pleasure for me to be here. Like Imma said I've
worked since the beginning of the 1990s in the field of
accessibility. I think Imma, I found Imma in the program in the
'90s where we run two or three projects in the field of
assistive technologies. I belong to the unit Sesal, access unit
of the Ministry of Science and Technology. That was a unit that
was created in 1999. After the W3C published the first version
of WCAG until now we run already a lot of plans, Governmental
plans in the field of accessibility. For today I will use my ten
minutes with transposition of the new directive of the web and
applications and some of the concerns of Portugal and some of
the things that we are doing at the moment.
   I think I have already the next slide. Yeah. I choose three
aspects to share with you about the transposition and these
three aspects are related with the monitoring methodology. The
other one is one of the most important elements and new things
that the directive have that is the accessibility statement. And
the third point is about the Portuguese observatory. So in the
first, the monitoring methodology, we are trying to answer what
the entities need to do according to the legislation that we
start in Portugal. We already done the transposition since 19
October of this year. This is a law already. The second
question is about what do the entities say they are doing. So we
are using the accessibility statement to turn public this kind
of information.
   And the third point is about the Portuguese observatory. So

the -- what we, we are the national entity responsible for the accessibility. In this moment I belong to the Ministry of Science but after the 15th of December I will go to another agency that will be responsible by the national -- is the national entity responsible by the -- to run this legislation. Beginning for the first, I think we have now the monitoring methodology is the slide that we have in the -- yep. The monitoring methodology that we have in our legislation, we have three kinds of efforts or three kinds of evidences that we are asking to the entities. One of them is using automatic tools to check the information, to check the information in a sample of pages. We are using and we proposed in our legislation a minimum of methodology that begins with a sample of home page. And all of the pages connected to the first one and also one page corresponding to the templates.

This is for websites. And in case of applications, we have one page per template to be tested by automatic tools. So this is the first step, the easy step. We prescribe this methodology not to the entities by outside the -- the studies not to buy the analysis outside of the entities. Is something that the owner entity will do is not to buy to a third company, consulting company or things like that. But our -- that what we have in mind is to the public entities, do this kind of job.

So the second one is the manual checking. And this -- in this case it is based on a functional checklist. A functional checklist we are thinking in ten functional aspects to be tested. Tested manually, not with an automatic tool. And in this case we have a sample of pages that have the elements that could comply the information that belongs to this checklist, this functional checklist.

And the third step is a usability test with people with disabilities. This is something new. I think it is the first time that the legislation expressed explicitly the user -- the test, usability tests with people with disabilities. Directive pointing to that but don't prescribe and don't enforce this kind of analysis. We put them in our legislation. We will have a label, a logo that will not -- it is not to say if the website is conformed or not. But they allow us to give a prize to the entity according to the efforts they do. So if they do the first step, they have a logo of one star. If they do the first and the second step, they have two stars. And if they complete the full list, they will have a logo with the three stars to enunciate the efforts of the entity.

So, sorry. Two minutes. Okay. About the second question that I put, a place to publish efforts and evidences about the accessibility statement, about the accessibility statement, we have two kinds of problems, writing the accessibility statement,

and reading the accessibility statement. I think you know that
nobody or rarely people read accessibility statements. So in the
writing the accessibility statement we are thinking in assistive
generation of the accessibility statement we are using the
contents of the model of the European Union, of course. And we
are using the generator of a project that is the vitals that I
think you will hear about more in this event, mainly by Shadi
Abou-Zahra. That will present the vitals and the tools that we
have already. About reading the accessibility statement we are
speak -- we want an accessibility statement that will be machine
readable. Machine readable to do what? To do -- to compile
information to the methodology exercise and also to make a
public tool to publish information about the accessibility
statement.

   So we don't want only a link in the accessibility statement
to the reports, we want in the accessibility statement also a
summary of the reports for then we could collect this kind of
information.

   And I end with the last question is what we are observing.
And in this field I would like to talk about the observatory.
And it is something that I will present Friday in the lab that
we will have the opportunity to explain more in detail the
observatory. But it is important, some of the preconditions, the
starting parameters to produce a robust observatory.

   I need to finish. One of them is the rules. At the moment
since 20 years until now we have the same recommendation, the
WCAG recommendations but different kind of ways to interpret the
information. So we have different kinds of rules, not only in
the automatic tools but also in the manual checking. It is
important to be harmonized. One more time the vitals project is
doing something about this kind of problem. And I think I need
to finish. And get tomorrow or Friday to present the
observatory. If you have someone interested in the observatory,
we will have all the pleasure to meet with you and present. What
we have at the moment is an open source completely free.
Everyone can use. And I saw this morning, for example, in the
presentation of Malta already some print screens of our tools.
So I think people use it. Thank you.
   (Applause.)
      >> IMMACULADA PLACENCIA-PORRERO: Sorry for the pressure but
we need to keep to the schedule because we are running a little
bit late. We pass to the next speaker is Amela Odobasic. She is
the head of the public affairs of the Communications Regulatory
Agency in Bosnia Herzegovina. And she is going to tell us what
they are doing to have steps towards the accessibility
legislation.
      >> AMELA ODOBASIC: I speak very fast. So I will be very

quick. I would like to ask for my presentation to be shown on the screen. And before I start just two short sentences, a huge thank you for the organizers, ITU and European Commission to have such a Forum since Jaroslaw said it was requested by the members. It was such a huge thing for us coming from Developing Countries. You are probably not aware the Delegation of Bosnia Herzegovina, seven IT girls who were among the contestants and they are shopping for attending for the conference on accessibility.

Now I would like to start my presentation. But I have to put it in the context of the European Union. As you all know Bosnia Herzegovina they are not a member of the European Union, we wish. When it comes to legislation and regulatory frameworks I should really just mention that Bosnia and Herzegovina has signed the Association agreement in 2008 which obliges us to harmonize our legal frameworks in all areas that is including the accessibility with the one of the EU.

Just briefly, I showed the mechanisms to promote accessibility. So what is important are important legal instruments, Convention directives and laws, Government decrees, ministerial orders, public services. That is everything what needs to define what needs to be done as well as the standards and norms which basically define how the things need to be done.

I refer to this particular slide where I just quickly point out several EU legal instruments which I -- as I said we are not -- we are not being a member of the European Union. They are not binding for us as such. However, of course, about the EU accessibility, talk now, but -- these are all positive news about the advances being made. And we look forward to proposing to our Government to look closely at it. When it comes to directing on audiovisual services Bosnia Herzegovina has harmonized the regulatory and framework back in 2007. We are going to look at the revised version to keep up to date. On public sector websites and mobile applications, we are working closely in looking at what Croatia is doing since they are our next door neighbor being a member of the European Union. So we will basically follow the good practices of Croatia and my colleagues from regulatory authority.

So I just basically point out several directives including the directive of public procurement and universal services directive that are familiar to us and are taken in to consideration while developing the legal and regulatory framework.

Just another piece of information to give you any kind of legislation that is being produced in Bosnia Herzegovina after we signed the stabilization and resource agreement has to be approved by the director of European integration. Market whether it has be legalized with the EU agreements.

Let's move on and see what the Government has done with regards to -- with regards to harmonization of national legislation and regulatory frame with EU legal instruments. The Government ratified the UN Convention on Persons with Disabilities back in 2010. Even the law on communications was adopted in 2001. And they had provisions included that protect the rights of Persons with Disabilities.

    The Government produces the policy document that's a strategic document for the telecommunications sector. In the latest version for 2016-2021 that we became aware of the need to have the provisions very clear and included in those documents. We propose to the government that the provisions on ICT accessibility for Persons with Disabilities are presented and are present and adopted as such in a very explicit way. They did not create a national strategy to ensure implementation of ICT but to see that in the future.

    So as for the national regulatory authority, we already harmonized rules and regulations. What's very important is the development of new law on electronic communication that be will paid attention to the EU accessibility legal instruments to be included.

    Now I will just go briefly through the three areas which and present some of the situations in Bosnia and Herzegovina. Due to time constraints I will not be going through the details. But when it comes to TV and video accessibility yes, the legal provisions are there. They are mainly general. They are contained in the law and public broadcasting system as well as the rules and regulations of the regulatory authority. However, however, they are not -- they are not binding provisions. And therefore the implementation especially when it comes to TV programming all the internationals and legislative framework and standards is very concerning in Bosnia and Herzegovina as well as in other countries of the region.

    Tomorrow at the session my colleague from Serbia will talk more about it. I will move on. So I just gave here a few examples on the good practices from the EU. So there are many others more present. But just -- I just pointed out here Belgium because it was interesting for us on how the -- how the accessibility provisions were being structured. Poland was interested because of these initial provisions that were quotas because that's a huge problem and that's what we are looking at now as a regulatory authority. And UK I just took advantage to have them as an example before they leave the EU.

    So I will not -- I will just -- so I have to skip this part to say that when it comes to web accessibility, websites and state institutions they are mainly accessible. There is still a lot of work to be done in terms of the validations as well as

the update of the law on public procurement in order to have provisions that are binding. Mobile communications, yes, they have access to Persons with Disabilities in Bosnia and Herzegovina. A lot of work has to be done again in defining and imposing the provisions with regard to affordable practices because they are on the voluntary base. And it is just -- I pointed out when it comes to mobile communications I just pointed out certain services that do not exist in Bosnia and Herzegovina. And they focus on speech-to-speech, relay services. Tomorrow we will be listening to Andreas' presentation and that will be all for me. Thank you very much for your attention.

   (Applause.)

      >> IMMACULADA PLACENCIA-PORRERO: Thanks very much for this overview. And sorry for having to be tough with the time but those are the instructions we have. So we pass to the next speaker, Ms. Sigrid Skavlid. She works in the Norwegian directorate. And she has been working for a long time with digital solutions on accessibility and usability. And it is important to realize that Norway has been a pioneer on legislation on ICT and universal design. So please go ahead.

      >> SIGRID SKAVLID: Thank you. Thank you for the invitation for this conference. How do I get my slides on? Okay. Thank you.

   Well, as mentioned I work in the Norwegian directorate. And this directorate is responsible for matters relating to state-funded child welfare services and also inclusion and nondiscrimination. The directorate is the executive agency for the Ministry of Children and Equality. And my field work is inclusion and universal design, especially when it comes to ICT and digital solutions. The Kingdom of Norway is a country located very north of Europe sharing borders with Sweden, Finland and Russia. Importing coffee costs and digital devices. We are approximately 5.3 million inhabitants and a population is aging. About 4 and a half percent are over 80 years old today. In 80 years the percentage will be around 12.

   50% say they have some sort of disability and 14% are immigrants. A couple of years ago we conducted a survey on how people manage in the digital society. And the first generation immigrants from nonwestern countries, blind and visually impaired and people above 80 were those who struggled the most in the digital society. With an aging society perhaps more people would be on the wrong side on the digital gap. Many might think that elder don't cope with digital devices. But the survey indicated that it is the connection to the working life that keeps the digital updated.

   So challenges here to come. And of the two referendums in 1972 and 1994 we are not a member of the European Union. First

of January 2009, the Antidiscrimination and Disability Act came in to force in the country. That offers goods and services to the general public are obliged to ensure the normal function provided if it does not entail an undue burden. What is undue burden is a matter of discussion. Universal design defined by the law is the design or adoption of the main solution in physical conditions including information and communication technology, ICT, so that a general function of the enterprise can be used by so many as possible regardless of disability. Noncompliance with this law is to be considered discrimination.

   If you experience exclusion you can complain to the antidiscrimination tribal. In 2013 the general Anti-discrimination and Accessibility Act was followed up with specific regulations on universal design of ICTs solutions meaning then Web pages and formats. The regulations stated that Web pages must comply with the would-be content requirements 2.0 with a few exceptions such as audio descriptions on media alternative and audio descriptions also prerecord for those you who you are in to details. There is a list of international standards to be met.

   The time limit for complying with these regulations were set to be within a year for new digital solutions, existing ICT solutions should be universally designed from 2021. And by that time also all solutions will be new anyway, probably I guess.

   Now the regulations have been extended to education including all learning platforms, learning management systems, digital textbooks, videos, like Youtube videos. They are in regular use in teaching. Apps are included in the regulations but the use of social media such as blogs, Facebook and Twitter for noncommercial purpose are not covered by the regulations.

   Next year the European Web Accessibility Directive will be incorporated in the Norwegian law. The directive law sets the same requirements as provided by Norwegian law already but introduces some new requirements like monitoring and Internet companies. Some changes in time limits, the question is whether we shall still have the same regulations for private and public sector or should private businesses be excluded if they have less than 50 employees. This is to be decided in the months to come.

   In Norway as a rather small country we have 500,000 registered businesses but 75% have one or less employees. So it is a general question of undue burden for very small companies to comply with the regulations for accessible websites. As we saw in Norway you just can't say Hallelujah, you must do it as well. It is not enough to make laws and regulations on digital accessibility, it must be done in practice as well.

   Who can help us in doing that? For that purpose the Authority

of Universal Design of ICT was established. Information and guidance work are also the main task of the authority. Supervision is very time consuming and they only do like 10 to 15 a year. Must manually check a lot of parameters for websites and selection of Web pages are selected. For example, contrast is checked where the headlines and forms, elements are coded correctly in images have alternative text and whether the entire Web page is useable for keyboard only. And this year the airline company SAS has been one of the company's Web pages supervisors.

   This also produced media attention as SAS didn't correct the errors and threatened with daily fines of 15,000 Euros in the end before they corrected the problems in the online booking solution. And this was considered an undue burden. SAS fixed it like the day before their deadline expired. The Authority of Universal Design of ICT also has done some supervisions on automates. The most common problem which is also free is physical access to the automates, but half the automates checked didn't comply concerning access to the automates where newspaper stands and shelves blocking. And this is free of charge to do something but only if you are aware of the situation and the regulations. Very positive and had a positive attitude towards universal design. And we asked them what kind of products or surroundings people believed should be universally designed by law and public buildings came out on top. 74% believed that public transport is obliged to universal design. No one believed that Web pages should be universal designed. Only 8% of respondents believed that private business websites were subject to universal design regulations, but the percentage was high for Governmental Web pages I must say that.
   Well, finally, there is no help in regulations if they are not put in to practical work. People must know the rights to accessible websites, automates and apps and digital textbooks in school and developers. And the one responsible for procurements must know about the regulations and how to take them in to account in the process. And the authority for universal design of ICT must have enough resources for information and audit. Here we have huge work to do when it comes to information. As I said you can't just hey Hallelujah. You must do it as well.
      >> IMMACULADA PLACENCIA-PORRERO: We pass to the last speaker of this session. And it is my pleasure to introduce Francesca Cesa Bianchi. She is the vice-president of G3ict. And she is responsible for cooperation programs, international agencies, organizations and support. And she is going to present us with the results of a very recent study and see what's the state of play of ICT accessibility. Francesca, please.
      >> FRANCESCA CESA BIANCHI: Thank you. Just as a little background G3ict was created by an initiative of UNDESA to

promote digital accessibility. We are doing that. Our focus has not changed. And we work with a multi-stakeholder approach, Persons with Disabilities, international organizations, public sector, industry and experts in accessibility. So as we -- our relationship with the ITU has grown over the years we have published a number of reports starting from the 2007 e-accessibility policy making and a number of technical reports and the model policy. So speaking about that, because we -- when we launched -- we did our research-based -- sorry. When we went basically in our advocacy work around the world we were looking at -- there were not many statistics and benchmarks. And we started in 2008 doing some progress reports, the CRPD progress reports. But the research was a bit complicated and heavy. So after the publication of the model policy we decided to simplify. And we came up with an index. So the digital accessibility rights evaluation index or their index is a tool that's done by advocates for advocates to benchmark and track progress made by countries in implementing digital accessibility and policies and programs. It is consistent with Human Rights monitoring, very simple country commitment, country capacity to implement and country implementation and outcomes. And our experts are Persons with Disabilities. We collaborated with Disabled People's International and the various National Assemblies. And when the -- there are not enough branches in the world. We collaborate with other networks of organizations of Persons with Disabilities. Like RIADIS in Latin America or other organizations, European Disability Forum.

   We had a global outreach of 121 countries. We surveyed about 89% of the world's population. So with the selection of the variables are based on the ITU -- ICT accessibility model policy report, both for commitments and capacity to implement. For the outcomes we had the pleasure a couple of years ago to organize two sessions on accessibility during the tenth anniversary of the CRPD at the UN in New York. And we worked with IDA, International Disability Association and DPI to come up with a -- collectively to -- with the ten key areas on ICT accessibility that are really needed for -- to guarantee Persons with Disabilities inclusion in society.

    The method is very simple. We have five points for each of the legs. So capacity -- so commitment gets five points. Capacity to implement, five points. And the ten key areas gets also five points. So the countries are scored out of 100 points. We have country profile on the index. I must say that while for commitment and capacity to implement we use a yes/no answer. If you have it, you get 5. If you don't have it, you get 0 points. For the outcomes we evaluate according to scale. We help the advocates to score their countries. For example, implementation

of two, it means policy or program has a minimum level of implementation because the project or program is still in a pilot project. I will leave the presentation to you maybe to dig.

   For the sake of time I can't go through the scale. The database of 121 countries is available on our website. And there are -- each of them have country profiles. So I take the one of my home country to show how it's organized inside. We have some data on the left side of the screen that represents the general score or other global results. And then we do have on the right side of the screen key country facts and then commitments, capacity to implement outcomes and their score, overall summary. Plus additional resources.

   So commitments, we look at the must-have pieces of legislation that a country must have to do policy making. So whether as signed Convention, ratified the Convention as a definition of ICT accessibility, definition of reasonable accommodation or universal service obligation that includes Persons with Disabilities.

    Commitments, it is a bit self-explanatory. Those are the processes that to implement the pieces of the commitments basically. So does the country have an agency for ICT? Does the country have an agency for Persons with Disabilities? Does the country have a mechanism to include Persons with Disabilities monitoring and policy making? Does the country have reference to standards? Or does the country, for example, have ICT accessibility courses at major Universities? This we think are the -- there are many other capacity to implement variables but we think are the main ones.

   E-books and documents, Smart Cities and so on, procurement and so on and so forth. So 18 countries in the European -- in Europe. 65% of the total European population. 18 are the ones that we surveyed. I'll skip a bit on global results by region. You see that North America, Europe comes second after North America in the eight regions that we surveyed. Capacity to implement and commitments remain constant. Outcomes are the ones that are based also on the level of economic development as you see in the following bar chart. And then here are some top performing countries worldwide in terms of outcomes.

   So on top we have Oman and Qatar in the Middle East because they have the -- they are very dedicated and small countries that dedicate a lot of funding. United States, Brazil, Israel. Then we have four European countries, Italy, United Kingdom, France Spain, and then Australia. These are top performing countries for actual outcomes in the ten key areas of technology. European commitment status is very, very good after 12 years. It scores against global results quite high. Here are

some examples on what the qualitative analysis that advocates brings back. So I will let you read about some of the qualitative information that we get.

Capacity to implement, here also Europe scores well compared to global results. 44% against 23% for inclusion of Persons with Disabilities, but still there is work to do in that area as well as ICT courses available at major University, 61% versus 37% of global results. Again these are scored -- especially the courses available at major Universities based on level of economy and development. But these are some of the results that you can see and cross tabulate with the index. Examples of capacity to implement, I will let you read about them. They are just qualitative information that our advocates provide to substantiate their results. Europe outcome status across all ICTs, I would say minimum level of implementation is -- this is the average level of implementation across all ten categories of ICTs.

So the ten key areas. So this is -- this is a slide that shows process, but -- sorry, it shows still some -- how Europe is still ahead in terms of global results. 27% are in Europe, our countries with minimal level of implementation. And 39% partial level of implementation against the global results that are a bit lower.

So here just very quick to conclude, web accessibility, Malta comes out as a champion with substantial level of implementation in web accessibility. And accessible TV here 4.4 out of 5 Denmark. 4 out of 5 Ireland. These are the champions with substantial level of implementation. Accessible mobile telephony we have a champion also with four points out of five, Spain. And to conclude inclusive ICT and education, again Malta scores five out of five, and four out of five is Ireland.

So as we heard the presentation this morning of Malta actually very glad about these results. And congratulations. There are still opportunities for improvement in Europe in ICT accessibility outcomes. The areas that we identify where there are opportunities to improvement are e-books and digital documents and public procurement.

So to conclude, I think this is really an advocate by advocate for advocates kind of evaluation. We are looking for more countries to participate in Europe organization of Persons with Disabilities that can provide feedback, validation to the data and as well can participate in the survey. The next round of the survey will come up in June. And I think with that I thank you for your attention.

(Applause.)

>> IMMACULADA PLACENCIA-PORRERO: Okay. Thank you very much. We managed to have four minutes left for the hour. So I

hope that we get the permission from the organizers to have at least one question. Yes. Please go ahead. Short. Sharp.

>> It is a question for Jutta if she is still on the line.

>> JUTTA TREVIRANUS: Yes, I am here. Thank you.

>> DONAL RICE: Hi Jutta. Donal Rice from Ireland. In terms of the arm's length bodies that we were talking about, are these organizations that are going to be developing standards and regulations? Or are they more going to be involved in providing guidance and assistance to public bodies?

>> JUTTA TREVIRANUS: So yes, these will be organizations such as -- there is a group called Casdo which is proposed at the federal level. These organizations will not be developing new standards. They will be able to digitally monitor what is happening with respect to technology except new innovative approaches as equivalents and do a scan of what are the requirements in other countries. So I think there was some worry that Canada would develop different standards. In fact, part of what we are attempting to do is to look at how it can harmonize with the leading standards in other countries. And also with respect to many of the ICT requirements we are looking at collaboration and harmonization with both Europe and the 508 refresh. The intent of the body are to look at what are the international good practices and allow for recognition of innovation where an organization or an entity exceeds the requirements that are currently there.

>> IMMACULADA PLACENCIA-PORRERO: Thank you very much, Jutta, for the answer. We don't have more time for the questions. Nevertheless, the speakers will remain in the room. You will have plenty of opportunities to address them. We just finished one minute ahead of time. Join me to thank the speakers and the next session we will move --

>> We need a coffee break.

(Pause).

>> ALEJANDRO MOLEDO: Good afternoon, everyone. While we are about to start this third panel, we will try to stick to one hour which is quite challenging as we have six panelists with us. So that gives us around ten minutes, a little bit less. If we could allow some questions from the audience. My name is Alejandro Moledo. I am the policy coordinator at the European Disability Forum. And I have been following some of the policies, some legislation we have been talking about up until now. But this panel is not so much about the legislation, the programs, the policies and initiatives on accessibility but how to implement them. So we are going to hear from companies, from organizations for people with disabilities from the public sector and how to support the implementation of these accessibility policies. So without further delay I will pass the

floor to our first panelist, which is Klaus Peter Wegge, head of the Siemens Accessibility Competence Center. So the floor is yours.

>> KLAUS PETER WEGGE: Okay. Good afternoon and thanks for being invited for this important conference. I have the challenging task to bridge from the legislation and standards approach to the real world. How to apply accessibility in practice. Okay.

>> Wrong slides up.

>> KLAUS PETER WEGGE: Okay. My colleague Bianca is pushing for the slides, but by the way the slides will be available in accessible format because I will not mention everything on the slides. It is just for having some material afterwards to, yeah -- okay. We are online. And we are trying to bridge legislation standards to accessibility in practice. We heard this morning we have three pillars for accessibility in the ICT that is public procurement which will be addressed tomorrow in a special session, but it is based on two existing directives from 2014. We have a web accessibility directive which was extended by Mobile Applications. And the new one, the European accessibility and all three hopefully are using the same standardization base. The famous European norm, it is not the lottery for the weekend. It is really the name of the standard.

Nevertheless, the good thing is we are talking about the same approach. That means that we have best case one European standard for all these three issues. It was not easy to follow the process in the trilogy of the European Accessibility Act. We have some observations on that. And we have some problems with the European Accessibility Act. Of course, we have the scope of the act. We have some products which are sometimes not very precise or not compliant to what we have in the ICT standardization environment. And sometimes we have problems to distinguish between products which are individually bought and used and products which are publicly used, for example, service terminals. I'm not extremely familiar with the latest development of the European Accessibility Act and the version from the 3rd of December, but please allow some small remarks on this document.

First of all, your written accessibility act does not deal with household appliances. The European Accessibility Act mentions mobile -- mobility only in the field of ICT. We have exceptions for small, micro and medium sized companies. We have, of course, some problems with the timing in the document because after the implementation the European Commission has two years' time of drawing up mandates for accessibility standardization. And then three times for creating the standards. And then it is already the time everything has to be implemented.

So how can industry fulfill these requirements? Also a little bit annoying is that the document seems in a position to let the accessibility requirements can be drafted and suggested by the European Commission without the advice or the involvement of standardization organizations. This should be, of course, resolved. And finally, we have a very interesting development because in the annex of the document we currently have a lot of accessibility requirements with which from my point of view should not be there because they are more or less copies of requirements of the famous EN document mentioned before. Except some environment adoptions, don't know where the wording comes from which makes the requirements not very easy to understand.

The European Commission has a tradition to set out mandates for developing standards. This famous EN was developed in old document 376. And the last version was from 2015. Now the M554 we extended this document to the needs of web accessibility directive. This document was published in August. And I am very proud that this document is a combination of the procurement and the Web accessibility requirements.

I just want to give you a quick overview on this document. Don't worry, I will not go through the complete document. It will take hours. But one important issue in this document is that we have, of course, the functional performance statements. That means if the requirements are all other clauses are not met due to technology we can find a solution which even supports persons with various disabilities in a very different way. This clause is often overseen but it gives industry a big flexibility in improving and creating new technologies.

Important for the Web accessibility directive are the clauses 9 and the software clause, No. 11 which includes Mobile Applications. For me it is a very good idea to improve, to use software applications on mobile devices. Because this is a very important way of using the Internet for Persons with Disabilities. The annex A is the connection between the Web accessibility directive and this document. It gives us a table which requirements are used for web accessibility of a mobile application. And the concern with this table is that besides about -- about 39 requirements from the Web content accessibility Guidelines 2.1, suddenly about 38 new requirements under some conditions are sometimes without conditions.

This is a clear extension of web accessibility content guidelines. And I am not sure how Member States will deal with this in a reasonable way.

Another issue already mentioned by Imma is the Mandate 473 which developed a standard on accessibility following a design for all approach in products, goods and services extend the range of users. It is about helping organizations to include

accessibility in their processes and their daily work. And I'm not sure but I'm -- I think this document will be included somewhere in the range of the European Accessibility Act. Please give me a chance to give you a short view on the accessibility legislation where the standards. I think I made it already clear that flexibility can only appear if we have a clear distinction between harmonized international standards on one hand and legislation on the other side. So from the standards, from the norms I expect functional performance requirements, design methods, methods for assessment of accessibility. I expect economic data, expect issues of interoperability with assistive devices. And we have beside this famous ICT standard about 300 different accessibility standards on the national, international and European level.

On the other hand, I expect from the legislation that legislation will use the definitions, the terms established in the ICT define accessibility, not define on accessibility requirements. And, of course, no separate methods for assessing accessibility. We need a monitoring system. In the national implementation this comes back to the colleague from Portugal, we have also some problems with directives like the Web accessibility directive. These are issues about the availability, the free availability of the translation of the documents and how to deal with exceptions or with additional issues when we -- for example, in Germany want to extend the Web accessibility requirements to level 3 partially. We have, of course, a silent change in culture in Europe. I don't know if everyone has noticed this at the moment.

We have the change that some companies, most big companies currently change the philosophy to accessibility for internal use. The driver for this is the aging society, the knowledge transfer and all these key issues. I brought with me some self-advertisements because we have agreement of inclusion between the headquarters of the employment and this is an inclusion agreement. And this states a clear word that accessibility is a strategy for general purpose ICT in the company. That means that everyday solutions should be assessed on accessibility during procurement, during your roll-out so that all employees will have the accessible tools. This does not deal with special software, for example, not with CAT systems, but for solutions which are very, very often used, for example, for travel allowance, for all these personal issues.

I think this is a big change. The surprising experience is when making procurement of these tools because we don't make them all themselves, suddenly the company says oh, Siemens tries accessible solutions. We only know this from public procurement. And sometimes even the venders do not know about accessibility

because they are using -- they have different priorities for public and private customers. A reporting system is established and we hope we will make some progress. And I know there are some other companies are doing the same way.

 Last slide, okay. Simply I want to give you at the end an example which we proposed for a company in Australia become a World Bank of Australia. This is a point of sale terminal which does not comply to Australian accessibility regulation which does not and does not comply to the current European Accessibility Act. It is a very new and successful method to enter a visual -- a -- a personal identification number, the pin at a point of sale terminal for blind users. And it works well and it is an example why we should not regulate technology from tomorrow with regulations from your study. Thank you.

   (Applause.)

    >> ALEJANDRO MOLEDO: Thank you very much. We move to our next panelist, Richard Moreton from Samsung Electronics Research Institute in the UK. Richard, the floor is yours.

    >> RICHARD MORETON: Yeah. Can we have a presentation, please? First of all, thank you very much to the ITU and to the European Commission for inviting Samsung here. As the title says TV accessibility and the work we have done. So the purpose of this is really to inform you about some of the TV accessibility features and listening to some of the early -- the very sort of early comments that people with disabilities and particularly visually impaired people who are consumers themselves and visually impaired. And if television doesn't sound like it matches up, it doesn't. These products that we create on one side with nice and we need people to be able to use them. And with the way that societies becoming old and older then we need to be able to support those -- sort of aging population.

    So what I am going to talk about here is not vaporware, not too much of a fluffy presentation. These are features on our TVs that are available today and have been available for a few years. If you have got a mid range upward Samsung smart TV you have some of the features, as Peter said you don't necessarily know it because people in the shop don't know.

   But anyway, so just to move on, so we have got a -- explain to you what a Samsung smart TV can do. I have ten minutes to get through ten different features. I am going to quickly whip through all of these. You don't need to remember all of these. I will be going through these individually. So features for visually impaired and hearing impaired users. So the first one we have something called voice guide. This enables the TV to speak or to read the text that's on the screen. So we are talking about providing verbal feedback for -- if you change volume. It will tell you everything in the EPG. So you are able

to navigate all the way around the sort of increasing
complicated hundreds of channels, 7 plus 14 days of program
guide and you can adjust the tone and the pitch of the voice
to -- this is under speed to adjust, suit to your individual
preferences. And for hearing impaired users we have something we
call multi-audio output and it allows hearing impaired users to
get the audio output both to Bluetooth headphones or assistive
listening devices and also to the TV's main speaker. In the past
I think if you plugged in headphones it blocked the main audio.
Now you have user interface to allow you to select either or
both. So maybe small change but hopefully release small things
all add up.
    And then moving on, so as I said readability of menus. The
first thing that we have implemented is a high contrast user
interface. So basically this configures the TV to display menus
mostly within a black background with white or yellow text
rather than sort of translucent sort of menus that are standard
in the TV. You can switch the TV in to this mode easily. We
have a feature called enlarge and this enables you to see some
of the important elements. We can sort of -- essentially makes
it look like the text is enlarged. And also some of the images
and graphical elements are slightly enlarged to try to enhance
the readability of what's on the screen.
    Okay. This is a good one. Have you ever wondered really what
some of the functions do on the TV? There are quite a lot of
interfaces in some places. If you are a man, did you ever lose
or, in fact, just never bother to read the user manual? Right.
So there is no excuses. It is in the TV. It is always in the
TV. You cannot lose it. It is all voiced. It goes through
virtually everything. I haven't exhaustively tested it. But it
will help you to guide you to learn the remote control. So you
can press -- you can put it in to a mode where you press buttons
on the remote control and rather than it acting those functions,
the TV will speak about you and tell you what you have pressed.
   So if you can't see the buttons you can feel and learn the
sort of layout of the keyboard. And we have the same thing for
all of the complicated menus that we put on there. So it will
teach you, the TV can speak back to you and tell you all the
functionality of each of the individual menus as sort of a
picture. You probably can't perceive this. All this information
is on our website.
   So I have got two minutes. We will get talking quickly. The
presentations are available afterwards. This -- all these
previous features have been available for a little while. We
implemented something for gray scale and puts in to sort of a
gray scale which sharpens up a lot of the images, sort of a
visually impaired improvement. We also support something called

color inversion where we mathematically invert the colors to make it easier for the people to read the user interface. Green is Magenta and blue becomes yellow through that mathematical inversion. So we have also a new feature for this year. It is called C colors application. Available on your phone. They also do iOS version as well as Android. Use this on your phone to try to adjust the settings on the TV to match your type of colorblindness, three types of colorblindness and different strengths. And the TV can be configured to support all of those.

   And very quickly we have accessibility short-cuts menu. So if you ever can't find any of these there is a single press on the remote control button and it goes in to this menu which is always voiced. So you can't not be voiced at least in this menu to start off with. And then very quickly we have as well as the TV speaking to you we have the voice assistant. So if you buy a model which is a mid range upwards with a smart remote control. You can tell the TV with its limited language what -- change channel, change volume, search for stuff, mostly on Youtube it seems. If you want more information about the -- all those images and information around our accessibility Web page this is the UK website with a link there. But it covers all of our Samsung's policy, not just TV but mobile and other sort of good devices.

   So one thing, smart apps, they are not our smart apps. But we have the capability to -- to let smart app developers access the text-to-speech engine in the TV. Certainly Netflix and Youtube have done it. Maybe one or two others. If I have missed them off, sorry. If you know any web application developers, feel free to apply the pressure and tell them they can do it in Samsung's environment. These days it is quite small screen size, 32 inch. This is a low end TV, 300 pounds on the website today. And that's it.

   (Applause.)
      >> ALEJANDRO MOLEDO: Thank you very much, Richard. I know you need to leave. So I will.
      >> If anyone has any questions.
      >> ALEJANDRO MOLEDO: If anybody has a burning question, please talk now or send him an e-mail.
   (Laughter).
      >> ALEJANDRO MOLEDO: Yeah, please.
      >> DAVID WOOD: Thank you. It is David Wood. Richard, have you got any feedback from the disabled community about which of the features are valuable and how valuable they are? Have you had a chance to do any trials with them? Thank you.
      >> RICHARD MORETON: They are all valuable, David. But seriously, they are on there because we have had requests to do it. But we have the TVs reviewed -- we have had the TVs reviewed

every year at least once a year by R and IB. I believe I'm not
involved in the other elements, but with the American Federation
for the Blind and I think it is an equivalent in Korea as well.
We get quite extensive reviews from disability organizations. It
is not our sole development skills.
    >> I bought one last week.
    >> RICHARD MORETON: Thank you. Keeping me in bread and
milk.
    >> ALEJANDRO MOLEDO: There is another question.
    >> Hi. Nigel from BBC. A point about the text-to-speech
thing which is for apps which is a fantastic idea. It is really
great. One of the issues that we have had in BBC is supporting a
lot of different devices from different manufacturers. They
don't offer a standardized rate to do it. So that's something
where I would say this is an opportunity for standardization of
our adoption of standards. There are web standards already for
screen readers. Maybe some kind of convergence that can happen
in the Web and TVs to allow us to provide that functionality
more easily across more devices.
    >> RICHARD MORETON: It would be great from our point of
view if R player was voiced on there. We use standard APIs, but
the difference it is done on the TV rather than BBC having
direct control over it rather than a cloud-based solution. Maybe
a slightly different approach.
    >> Sure.
    >> RICHARD MORETON: We can continue talking.
    >> Very supportive of the idea.
    >> RICHARD MORETON: Thank you.
    >> This is Martin from Smart in Life Austria. It is a great
example of what can be done for accessibility and what is done.
99% of the users who could benefit from it normally don't know
about those features. What is Samsung doing to promote all these
features that all the efforts you put in to making them good and
great are used?
    >> RICHARD MORETON: This is a very good question. In part
speaking at events like this, I have spoken at quite a wide
variety of events just trying to inform. The aim is to inform as
much accessibility organizations because they can target their
own members and provide them information. So, you know, I see it
very much as an information delivery system rather than a
promotion of what Samsung has done. In some aspects quite a
specific requirement. I mean you are right, it is difficult if
you go in to shops. They may have been told it is not front and
center of how TVs or any consumer products are typically
retailed. I think it is an area that does need to be addressed.
I don't have necessarily all the answers but trying to deal with
this type of thing. If it is publicity that we can make about

the accessibility features, we will try and do that. Just try and get a word of mouth.

>> ALEJANDRO MOLEDO: Thank you very much. We don't want you to miss your flight.

>> RICHARD MORETON: I must dash and find my taxi.

>> ALEJANDRO MOLEDO: We move to Miguel Angel Duboy who is director of CEAPAT-IMSERSO in Spain.

>> MIGUEL ANGEL DUBOY: Good afternoon. First of all, thank you to the International Union of Telecommunications. Thank you to the European Commission and thank you to the United Nations for inviting me to this event. Congratulations to everyone for such an important presence.

CEAPAT is the national center of assistive technology. It will be 30 years old next April and it belongs to the Spanish Government Ministry of Health and Social Services. I would like to share with you some conclusions to start. Maybe this is a little paradox, but I like to say that accessible ICT is not only web accessibility, accessible ICTs are not only apps for all, obviously web accessibility and accessible Mobile Applications are key. Accessible ICTs is not only television for me. Accessible ICT is you and I. This is why I chose the international symbol of accessibility and I that we have should never forget that accessible ICTs are beyond technology even though technology is extremely important. Accessible ICT is making my life accessible. I am a telecommunications engineer. I love technologies. But technologies are just useful if they make my living accessible. It is not only about enhanced functionality for radio, television, computers, TVs and so on. This is very important but it is not enough.

How accessible ICTs can empower my independent living, our independent living by making word readable. Everyone understands that. By getting word audible, we should everyone should have their right to listen, to understand what we are paying attention to. By making word navigatible but from a physical and metaphoric point of view. By making word touchable. ICTs can contribute to accessibility in many, many ways beforehand. They should be accessible by themselves. When they are accessible by themselves they can support other lack of accessibility all over the world.

If my voice is very short, and I'm using this microphone, many people can listen to me even though they may not have any hearing impairment at all.

So in this presentation I'm not talking about the accessibility of ICTs but the potential of ICTs to enhance accessibility if they are accessible. How we are working on this in the last four years in CEAPAT taking in to account ICTs for assistive technologies. That is also very important and very

key. Unfortunately accessible ICTs are not solving everything
yet. If I hardly can touch the TV sets, assistive technologies
for everyone, can everybody open a plastic bottle by themselves.
That bottle is not designed for all. This is why we are taking
advantage of ICTs supporting 3D printing as a solution. I say is
the solution because we have been working on that for over four
years. And we are solving the problems of accessibility for
many, many people. Because we can design for all and replicate
many, many times. We cannot do with mainstream hardware. We are
working on 3D assistive devices and they are here. This is not
the future.

   They are here. Now I'd like to show you some examples. We
are producing an open stocktaking implementation of accessible
ICTs. We are using information and communication technologies
for information and communication devices. Smartphone to the
left, maybe you cannot see that support in blue that is under
the mobile phone. But we created it so that people with hearing
impairments who are using the sign language they can use Skype
in a very proper way so that they can do a sign language. But
how can you do sign language and hold the mobile phone at same
time? You don't have three hands. We design with 3D for the
National Association of the Deaf so they can use the mobile
phone, sign language, Skype and hold the mobile phone. That is
just one Euro more or less and validate with them by the way.

   What happens with a keypad? Many, many people cannot use the
keypads. We designed that other solution, the blue one to the
right. You can use the keypad with your hand. That's one Euro,
too. All of them are fully affordable. How can a person use a
keypad with their -- with the forehead? We designed that other
solution with red in the picture. It was decided for people with
very, very severe physical impairment in some of the centers all
over Spain. To the right you can see in the pieces in blue, the
one we design and implement and validate and transfer for
whoever all over the world.

   How can a child switch on and off an electronic toy whose
button is fully invisible? As time is getting over I'd just like
to share with you our ready-to-print assistive technologies by
CEAPAT. If you go to CEAPAT, you have 29 designs of ICT-based
solutions for accessibility that we have implemented in the last
four years and a half. All are for free. If you have a printer,
you can download them and print them. And you can make the world
more accessible.

   Just conclusions to conclude, accessible ICTs are not enough.
They definitely should empower the people. They are our global
mission. Accessible ICT by themselves, accessible ICTs do make
an accessible world. Our goal are the persons. The persons, not
the technology, even though the technology is obviously

extremely helpful. 3D makes accessible city. That's our
experience. We are open to share it. Welcome to the present.
Thank you.
   (Applause.)
      >> ALEJANDRO MOLEDO: Thank you very much. Now we will pass
the floor to Klaus Hockner, CEO for Austrian Association for the
Blind and Visually Impaired in Austria and an EDF ICT expert.
      >> KLAUS HOCKNER: Could I have the slides, please? Thank
you. Okay. Obviously don't have installed the right Braille
letters in the computer. Because on the right-hand side -- on
the left-hand side you should see some Braille print, but there
is no Braille print obviously. It shows one of the obstacles
that we have now. You have to install separate programs if you
want to be accessible. But that's not my topic. My topic today
is another topic. I am not presenting you very new things. And
that's one of the problems we have here. I want to have a
statement in the beginning, we all know each other. I think we
have seen each other in conferences all over the world in Europe
and in America and Asia and so on and so on. We have to go out
to the persons that are not known, that don't know what is
accessibility and what's about accessibility and that's one of
the biggest problems we have. We have to make accessibility
mainstream as it was said in the morning. One of the most
accessible things, one of the most common things in the
community of the blind persons is Smartphone and never -- 15
years ago nobody would have said blind persons can use a
Smartphone. That's impossible. But now they are all using
Smartphones and that's not because it was designed for a blind
person or disabled person, for a person with a disability. It
was designed for a mainstream. It was designed as a gimmick or
as something what is very, very useful for all persons.
   And that's one of the things that I want to say in the
beginning. And my presentation is rather an overview in what we
have done here in Austria and specific field and specific sector
in the field of web accessibility. But I want to make a big
survey before coming to the certification of the websites, the
WCAG, the Web accessibility certificate Austria and the
certificate for persons, the CWAA and perhaps somebody could
click on this. That's one of the old things, listen carefully.
We made it ten years ago.
   (Video).
      >> One day the people are going to scream too late and then
we will all be killed.
   (Laughter).
      >> KLAUS HOCKNER: I think this summarizes the thing very
good because why shouldn't a blind person fly with a plane
within the next 15 years when we are able to drive a car

autonomously? Why a blind person shouldn't do this? Yeah. And this was made ten years ago. Yeah. This little comic strip whatever you -- whatever you call it. And we are speaking about all -- very specific things, but we are not speaking about the general things that we are using as nondisabled persons. We are flying -- we are using voting machines. We are using other things like -- great. Sorry. Was the wrong. We are using other things and all these things are not accessible. We are going out and we want to buy tickets but the ticket machine, the ticket vending machine is not accessible because we have the European Accessibility Act. But there are other things that are not accessible because the people don't think when they design all these things. Don't forget the target group. We are speaking about one billion persons only with disabilities in the world. And we are in a good position here because you we are living in Vienna. What about the non-Developed Countries? Technology can help them but they can't afford it. So we have to look for other options, for other technological options that can help these people. And the scope is -- what is ICT as it was said by some of the people speaking beforehand? It is websites. It is Smartphones, washing machines, daily life. It is cooking. Why shouldn't a blind person not be able to cook? Why not? For example. And one field which is -- which is now coming up and which I think is one of the major drivers and game-changers within the next 20 years robots, apps, Artificial Intelligence driven applications, block chain, all these -- these key words and they are ongoing efforts now to standardize all these things. But no one out of the community is involved in -- within this process now at the moment.

   We have a legal situation that is clear. All of us know that the CRPD 160 signatories, now finally all the countries in Europe have signed it. We have some mandates that was mentioned before. I don't have to mention it again. We have some standardization issues now coming up at the moment. For example, Artificial Intelligence JTC-1. But there is no one out of the accessibility community sitting in this JTC-1 SC42 Artificial Intelligence. So I think it is very important to work with this -- with the standardization issues.

  So now to the promised things, what have we done in Austria. I always call it a little bit -- accessibility ecosystem Austria. We are trying to provide education, certification of persons and certification of websites. When I was out in companies, they always ask me, how can I prove that my website is accessible. I need to have a certificate otherwise I won't do it. And this is, okay, you have to do this like this and this and you have to follow the WCAG 2.0, 1.1 because it is a legal obligation in Austria.

Okay. If I want to do this, who can do it in Austria? Who can do this? What's -- tell me the person, tell me the company that has the certification for website -- for website accessibility, for web accessibility. Because normally you are going out and asking the person, okay, you know about web accessibility and nine out of ten designers will say yes, I know it. You have to make alt texts.

And I think you have to make website -- it is possibly a little bit bigger, the -- or something like that. I don't know it exactly. But my website is accessible. All websites we are creating are accessible. And you have to have certification I think. And therefore we created the WACA project, the Web Accessibility Certificate Austria project, where we have three levels of certificate. It is a long way to go. At least one and a half years to go until they are ready to apply for the certificate after all the repairs that they have to do. And the bureau of the project is the Austrian computer society which is a non-profit organization with more than one thousand members in Austria which has no commercial interest, but nevertheless sustainability is needed, means we have to have some inflow to test. That means the certification costs a little bit of money because we have to maintain it. And the same is for the certified web accessibility expert, we have a little bit another project, IAAP, for example, which does this on a remote way. We have a real person, we have a real person sitting in front of real persons asking them about their knowledge and accessibility. Yes. That's the short overview of this. Yeah. We have (inaudible) sitting here for the project. He can help you if you have any more questions or details. And I'm attending only today. Sorry. If you want to have more information about the other things I mentioned. Thank you.

(Applause.)

>> ALEJANDRO MOLEDO: Thank you very much, Klaus. Now we move to Monica Desai, director of Global Connectivity and Access Policy at Facebook.

>> MONICA DESAI: Thank you very much. Would you mind loading the slides? Thank you. Thank you to the ITU and to the European Commission for organizing this event. And thank you for moderating. I am Monica Desai. And I lead global connectivity and policy at Facebook. Prior to joining Facebook, I spent over a decade in senior positions at the Federal Communications Commission including as chief of the Consumer and Governmental Affairs Bureau which develops all policies and rules in connection with accessibility. And also as chief of the media bureau which has oversight over broadcasters and cable companies and oversees captioning.

So it is personally very satisfying for me to be at Facebook.

We built a variety of tools to enhance access to the platform recognizing that the space of disability is fast and complex. And there are no one size fits all solutions. Our commitment is actually inherent in our mission which is to bring the world closer together. And when we say we mean everyone regardless of ability. So accessibility is fundamental to getting our mission right. Our automatic alt text and face recognition tools leverage Artificial Intelligence and machine learning technology to help people who are blind or have low vision understand more about the content in a photo on Facebook. Automatic alt text uses object recognition to describe photos to people who use screen reader. And our face recognition tool can tell people using screen readers who appears in their photos and their news feed even if they aren't tagged if allowed on the person's setting.

For context every day people share over a billion photos on Facebook. So research we learn that users of screen readers wanted more context for a photos content. Prior to these developments, the traditional mechanism for describing photos as Klaus had mentioned is the use of alt text. Alt text is data attached to an image that's typically used to describe the appearance and function of an image on a page. But adding alt text to an image requires that the content creators supply secondary description on a per photo basis. This is time consuming and an uncommon consumer activity. Automatic alt text and face recognition tools were significant developments because they automatically allow for photo description. And today automatic alt text can detect more than 100 concepts such as the number of people in a photo, whether people are smiling, physical objects like a car, a tree, a mountain and other objects. About 75% of the photos on Facebook now have at least one image identified by automatic alt text. And we are excited that Instagram just launched support for automatic alt text last month.

We are honored that these tools have won a number of awards just last year and this year including the FCC Chairman's award for advancements in accessibility and the American Foundation for the Blind's Helen Keller achievement award for 2018. Feedback from our users was incredibly important in developing automatic alt text. We ran multiple rounds of research to refine that experience, this including a number of one-on-one interviews with users of screen readers to test out early prototypes and follow-up surveys and trials asking for feedback.

Based on the additional feedback that we got through those trials and interviews, we understood -- we updated automatically alt text to -- so that people would understand more about actions in a photo. Meaning what people are doing in different

photos. More generally we do consistently solicit feedback from people with disabilities about new products and accessibility tools. And we maintain regular dialogue with disability advocates and rights groups.

I also want to touch on captioning on Facebook. Because Facebook is a platform, the decision of whether to add captions to video ultimately rests with the user who is uploading the video or photo. But we have introduced and are working to improve tools to make it easier for users to add captions. People uploading a video to Facebook have two options for adding captions; can manually apply captions with support and we support captions in multiple languages. Second for videos posted to pages, and for many video advertisements in the United States they can use a Facebook tool that we begun to roll out to automatically generate English language captions. And we hope to generate that -- we hope to roll that out more broadly. For Facebook live, with the increase in realtime video and more live video being shared we have invested in realtime captioning capabilities. Facebook live captioners can add these captions either by using a closed caption insertor tool or working with a third party caption provider to generate and insert realtime closed captions in to their live broadcast.

Those are just a couple of the tools that we have developed. And there is more information available on our website. As someone who has worked in the space for many, many years it has really been a privilege to be at a place such as -- that places such emphasis on accessibility. We have a dedicated team thinking about conditions like vision loss, hearing loss, motor disabilities and cognitive impairments and how that might influence some -- how somebody interacts with technology. Accessibility is also embedded in to different departments that touch on the product life cycle including research, design, engineering policy and legal.

I want to end by noting that we recognize that to build products that are accessible to everyone, we have to have employees with diverse abilities. For us hiring people with disabilities is a large priority. We have a number of dedicated resources supporting candidates and employees with disabilities including an accommodations team that supports candidate requests for accommodations at all stages of the interview process as well as employee accommodation requests in the workplace. We have a dedicated program manager that drives strategy and partnerships to attract and retain employees with disabilities. And we have recruiters and sources that engage industry and university channels to identify and connect with candidates with disabilities. In fact, Facebook was named as one of the 2018 best places to work for disability inclusion in our

year of participating American Associations of Persons with Disabilities equality index. And we are proud of that recognition. I know we are out of time. So I won't -- thank you very much.

   (Applause.)

      >> ALEJANDRO MOLEDO: Thank you very much, Monica. Now we continue with our last speaker, Dorothee Ritz, general manager of Microsoft here in Austria. The floor is yours.

      >> DOROTHEE RITZ: Thank you. It is a great pleasure to be here. I am the sure person who doesn't present a powerpoint which is probably interesting for Microsoft. Yeah. But I think it is -- we can start with what we have seen. So we have seen a lot of powerpoints that have an English language text translation underneath. And while, Miguel, I am totally with you the technology can't solve the problem and it can't solve inclusion, culture, physical barriers, what we can do today in any powerpoint, in any Outlook, any Skype call, we can have text. We can have voice to text. We can have text translated in 70 different languages. And the power that we are seeing right now is that it is literally three. So the question that we are having and that we really want to solve is how do we get that in to the hands of everyone because we are at a pivotal moment where we have these tools. Where I love the blue thing where you can push down the typing buttons but hey, there is actually today tools where you don't even need the touch because you can look and the look actually can facilitate a typing.

   So and this is just the beginning. But that's the point where we are. So from Microsoft's perspective we have been in accessibility in all of our products inclusion for the last 20 years and I have been there for 15 years. But to our great frustration you mentioned it is only accessible these technologies to 10% of the people with disabilities. You also mentioned there is one billion impaired people in the world. And what we also know is if you kind of think deeper about how do we include them in society and workforce only 70% of those disabilities are not visible. So entering it and overcoming and creating a culture is difficult, but we are at an incredible point in time where we actually can do that. And at the same time at the moment I think the workforce is looking for skills and they are looking for lots of people. So Microsoft believes that now is the point where we can really change some of the demographics that we haven't been able to tackle in the last 20 years. And fortunately or fortunately it is the combination of technology with a lot of physical tools.

   But what we can do today is really to -- I mean think of the millions of people who use collaboration tools, like Outlook or like powerpoints. Today we can educate them in a very different

way. We can include them in a very different way -- very easy
way because Artificial Intelligence tools are free. Microsoft
for personal reasons, if you read his book he has very personal
reasons why this topic is so important to him. He says while
Artificial Intelligence becomes such a powerful tool and it
becomes cheap, it becomes accessible and cheap. He invests in
the initiative of AI for accessibility. 25 million dollars in to
creating more opportunities for accessibility and how do we do
that? We invite developers, we invite Universities, researchers
to create AI.

   And why I totally agree apps are not the solution for
everything. Let me share one application. It is called seeing
AI and actually it has been created by blind developers who
actually created an application where they can participate in
society in a way of kind of going shopping or just doing very
normal things in the business life because documents are read
out to them that you can see sentiments of the people who is
across or you can read bar codes when you go shopping. It will
become better over the next year. We have platforms where people
can develop cheap and free and we put it in to the hands and try
to get it out there.

   So I think that's where we are today. Microsoft has by
design accessibility rules. So all of our products should be
accessible. If you come to the Microsoft building, if you
participate in anything we do we want to make it accessible. Any
speech, powerpoint, Skype calls has the opportunity to be
translated in text, translated in different languages and make
it accessible. Many people have these tools in their hands
already. How can we include more people with disabilities in to
the workforce? It all starts with education. And there are so
easy plug-ins in to the working tools that people have been
using for so long that make it easy. Somebody who is colorblind
we can actually overcome. We can help them read better, but more
importantly they can participate in a Masterclass as the same as
anyone without this disability. That's what is very important.
The way Microsoft works is that we have a lot of people with
disabilities in the developer team. We need and build on them
because those are the people who know what is needed. And so
they design the products for the needs and for the real problems
that are out there. And they are also tested by the community.
So by the time we release it, they should work. And they should
be solving real problems.

   So now we really just need to scale and see how we really
kind of get it out there. I think we are loose here at a pivotal
point. That's why I think over the next 25 years we can make a
real, real difference by including those more than one billion
people who have a disability and 90% of those who don't have

access to technology because technology becomes cheaper. And it becomes more accessible in more parts of the world. The more we invite the broader community, the developers, in to our ecosystem to develop solutions for the problems that they know the better we get and the more we get it out there.

So let me close maybe with one example of a business analyst in Guatemala. His name is Otonoker and he had ALS for the last 20 years. His doctor said he wouldn't live long. Two decades he still lives with the disease but he is blind. He developed with some people together a simple Windows 10 tool that's called Eye Control which still allows him to communicate with his family and friends and participate in the work space. We know that inclusion in society has a lot to do with work. Microsoft wants to make all of the tools accessible so that we can include more and more people in to the workforce. And our mission is to do that by including it in the tools that people know and that they use by make it more accessible. And the way to do it is to open the platforms for developers, for research institutes, for anybody who wants to connect and wants to build on these platforms. I think by doing that plus changing our attitude towards inclusion in the workplace, which I think there is a really good chance right now because you really need certain skills and many, many people have these skills who today don't participate in the workforce I think this world over the next couple of years can become a better place. Thank you.

(Applause.)

>> ALEJANDRO MOLEDO: Thank you very much. As we all know we are very late in time. So I will just directly offer you to ask some questions, burning questions. Otherwise we can have it during the reception afterwards. Anybody? Nobody?

>> Somebody has a question.

>> ALEJANDRO MOLEDO: Okay.

>> I have a question related to the person who was presenting about Microsoft. I have one deaf friend from Austria who is really interested in programming. And that's his work. He is working for Microsoft as well. And he is using -- from the Microsoft platform he is using an e-learning tool, but I think it is very interesting because they also have speech-to-text. So you can see different videos. But captioning is just in English. And it just -- it is just in certain videos. Say 90% of the videos do not have captioning. Regarding captioning in other languages, like German language it is very scarce. So I think this kind of accessibility has to be improved somehow in other languages rather than just English. That was my comment.

>> DOROTHEE RITZ: That's a bit strange and put your friend in contact with us because we can now pull up a video from 1970, so very popular in Austria and have that not only translated in

different languages but also to have the key words recognized so that you also find certain pieces. So I would love to understand deeper where, you know, where that connect -- I totally believe that your friend has the issue and let's connect and see which tool that sits in order to solve it. I have people in my team who are specialized on all of these tools. So I would love to have that feedback in order to have a direct conversation. Thank you. Thank you for raising the point.

>> ALEJANDRO MOLEDO: Thank you very much for the question. Unfortunately we don't have time. I will conclude this session. We all know these are exciting moments for accessibility. And in the following panel we will have an opportunity to discuss with each other of what we want which is accessible technology for all. Thank you very much.

(Applause.)

>> So in case you want to pick up your coats please do so before 6 o'clock. Thank you.

(Pause).

>> ROXANA WIDMER-ILIESCU: Ladies and Gentlemen, let's try to start this last session. I know we are all tired and it was a lot of information. Let me tell you this session, it will be a very very interesting one. Some of the panelists even mentioned that this is their most interesting. So let's try to interact the subject. I just want to mention that I invite you all to take a look at the bios of the distinguished panelists. They are all absolutely exceptional and experts in their fields.

So having said this, I will also briefly try to set the scene of this panel which, of course, is the legal framework within the EU with respect to the Web accessibility. So we all know that it was a directive adopted on 26th October 2016 of the EU Parliament and the Council of the accessibility on website and mobile application of public sector bodies. And then we had the directive that was complimented with two implementing decisions just adopted in last October 11.

So the first one, the model accessibility statement to be used by public sectors in the Member States on the compliance of their websites and mobile applications. And for the purpose of accuracy I am actually reading all this to be sure that everything is exactly as in this decision. So this should comply with the level of the compliance status with an identification of nonaccessible content. Of course, the feedback and content information is requested and a description of the enforcement procedure.

We also have monitoring methodology and the arrangement for reporting. So it is already in place by Member States in accordance with this directive. Having said this the Member States had until last 23 September to transpose the text of the

directive in to their national legislation. We also know that the existing websites have until 2020 and the new one until 2019 as deadlines to comply with all accessibility requirements. So this is a very challenging deadline for all of us. And in addition the mobile application of public sector should be also implemented by 2021. So having said this, I have the pleasure to give the floor to Ms. Gudrun Stock, deputy head of unit, accessibility, multilingualism and safer Internet unit, DG CONNECT, European Commission.

> GUDRUN STOCK: (Off microphone). Thank you. So as announced very skillfully by the moderator of this session I am going to present the Web accessibility directive that had to be transposed by the 23rd of September by Member States this year. So how do I -- oh, okay. So the Web accessibility directive has a dual objective. One is the social components aim is to increase the digital inclusion by ensuring websites are more accessible to users and in particular to Persons with Disabilities.

And the other leg basically to this directive is to improve the functioning of the internal markets. Okay. Okay. By establishing common accessibility requirements. These accessibility requirements relate to the perceivibility, operability, understandability and robustness on public sector websites and mobile application. The content can be presumed to be in conformacy with these common accessibility requirements if they meet the requirements of a harmonized standard. So this standard was adopted by the European standardization organizations earlier this year. And it is about to be published in the official journal of the European Union. So this harmonized standard it sets minimum requirements for the presumption of conformity, but Member States may go beyond in their national measures.

So who has to apply the accessibility requirements? So it is public sector bodies who have to do it. But there are a number of bodies that are excluded or that did not apply to. On the one hand public service broadcasters and NGOs provided they have no services which are essential to the public or they don't have -- if the services don't have a specific link to Persons with Disabilities. And further in the transposition Member States may exclude websites or schools, kindergartens and nurseries but still essential online administrative functions have to be accessible. So it must be possible to enroll a child online and that service has to be accessible. And then Member States are encouraged to extend the scope to private sector entities that offer services or facilities of interest to the public. Like, for instance, electricity, transport or health care services.

Then what do these accessibility requirements have to apply to? So it is websites and mobile apps of public sector bodies which there are certain content types that are excluded which should be made available on-demand. Exclusions related to legacy content which is not in indispensable for present online interactions or services. And exclusions also relate to where it is not feasible or where the public sector body is not in control. So this can, for instance, relate to live videos or maps and mapping services or to where the public sector body is not in control for third party content. And then public sector bodies may also invoke a disproportionate burden but certain analysis has to take place. So it has to relate to the size and resources and nature of public sector body and a cost benefit analysis. Talk a lot about exclusions, but everything I don't mention it does apply to. And this basically also concludes the substantive part of this directive and going forward because the transposition deadline has passed monitoring to ensure compliance with -- that's where the focus will shift because we set the framework it had to be transposed and now we have to look how is it going in the Member States and does it make a difference.

How can we ensure compliance? On the one hand as the Moderator already referred to there is an accessibility statement that should be possible to find on websites and mobile applications of public sector bodies that will provide information on the status of compliance of respective websites with the accessibility requirements. And it should provide information on accessible alternatives in case you can't find content on a website or the mobile applications. And it should also provide links to feedback on enforcement mechanisms.

Then the next measure is monitoring. So Member States have to appoint and notify to the commission a central body that will take care of monitoring the compliance of the websites and mobile applications of public sector bodies. And they will have to verify compliance. After this monitoring has taken place during a certain period in Member States, Member States have to report to the commission what they found in their monitoring every three years.

Sorry, my button is -- so this is the -- and there are certain other measures to ensure compliance. So this is the feedback mechanism that has to be linked on the accessibility statement. So users who find there is content which is not accessible can report it and ask for it to be made accessible. It can also relate to the on-demand provision of excluded content. So if there is a certain document that you think is necessary for you but it is not available or it falls within the category of excluded content you can ask for it to be made

accessible to you. And the public sector body has to comply with
this. Also has to be an enforcement mechanism. It means that
the Member States have to appoint a body that will be
responsible for enforcing the directive.

   So users with disabilities have resources to adequate and
effective procedure to see that the provisions of the directive
are enforced. And then Member States have to compliment this
with training and raising awareness and consulting stakeholders
and the commission or the EU will facilitate the exchange of
best practices to compliment these training measures and
awareness raising.

   So then I come to a timeline. Some of the dates have already
been mentioned initially in the introduction of this
presentation. So this is basically a timeline of major
milestones of the adoption and transposition and implementation
of the web accessibility directive. It was adopted in 2016 and
the transposition deadline was in September this year. The
important milestone is all new websites of public sector bodies
have to be accessible by September 2019. And the next year in
September 2020 all websites will have to be accessible including
also all websites that already existed. In 2021 the next
important deadline in addition to the public sector websites
mobile applications will have to be accessible by June to the
commission. And then the next job is for us in 2022 the
commission will have to review the application of directive
taking in account the results reported by Member States. So
that's our horizon so far and after that we see. After 2022 we
see how it worked out with the directive until then.

   So the title of this session is what is the role of
Governments in providing accessible digital public services. And
we thought about it with the colleagues and thought Governments
can put accessibility at the core of virtual cycle for
accelerating the uptake of accessibility requirements. By
analyzing gaps and legislating or adopting laws by taking care
that the laws are enforced and then by monitoring and reviewing
how the laws are implemented and applied in the community. And
in doing so they would hope the Governments there will be a
spillover effect to the private sector and through this
mechanism and process accessibility requirements would be taken
up more widely and more quickly across the board. And this will
in the end benefit users with disabilities with more accessible
public services.

   And then we have a last slide with links to use for
documents, the directive itself and model accessibility
statement monitoring and reporting methodology, European
standard that is going to be published in the official journal
of the European Union and then our web page. And last but not

least if you still have questions, a contact. So this is your
feedback mechanism for you. Thank you very much.
   (Applause.)
     >> ROXANA WIDMER-ILIESCU: Thank you very much. And with
this let's try to hear about the World Wide Web Consortium and
the Web accessibility initiative. So Shadi.
     >> SHADI ABOU-ZAHRA: Yeah. Hi everyone. Long day, huh? So
you heard the policy side of the web accessibility directive
which I think is a very important step. I am more the tech guy.
And looking at some of the standards and resources that might
help you apply these -- this policy and practice. So I first
want to take a bit of a step back and just remind us of the
scope of web accessibility, what we are talking about because it
is -- there are many aspects to what we call the components of
web accessibility that need to play together to ensure that
there is actually accessibility. One of the fundamental things
is making sure that accessibility features in the core
accessibility, in the core web standards. So, for example, in
HTML and CSS and all these technologies that people use to
create websites and mobile apps there are accessibility features
that need to be built in. Why is that important is because we
are seeing this as a constantly evolving media. It doesn't stop.
We are looking here at immersive environments and looking at
IoT, AI. All these buzz words they are coming and converging on
to the web and providing more functionality which is in one side
a huge opportunity for people with disabilities and the other
hand we need to make sure that there is continual research and
involvement so we can make these core technologies accessible.
And I want to point out the process of creating the content and
the content creation how that is essential. Most of the content
that is created on the Web is created by nontechnical people,
not by the tech savvy developer or the designer knows what an
alt attribute. And we need to provide here far more support.
And this is an area that we should focus on a little bit more. I
think there is -- a little bit too much attention on WCAG and a
little bit less on other aspects that are I think equally
important.
   And finally, also the user aspect. We shouldn't forget that
there are many assistive technologies. For example, even in
Europe, I'm not going to go to the other areas of the world, but
even in Europe we have many languages that are not properly
supported by text-to-speech. There is still a lot of work to do
on assistive technologies and making sure these tools are things
that we can rely on so that we can ensure accessibility. If I
cannot rely on the assistive technologies to do their part, to
communicate the accessibility, to provide the interactions to
the users.

So just taking a step here back and giving the picture, the scope, now regarding the Web Accessibility Guidelines, the Web Content Accessibility Guidelines is probably the most important part here that defines what is accessible content and by content we really mean anything that is on the Web. This is text, forms, graphics and so on. All these things need to be made accessible. The authoring tool accessibility guidelines this is a key in implementing or maintaining the level of accessibility to achieve policies like the Web accessibility directive or other policies. And we shouldn't forget even social media applications, because we had Facebook in the previous panel. That is also a kind of authoring tool. And these improvements that they did, for example, to be able to provide textual alternatives is a good example of how the authoring tool can support users in making content more accessible. And we don't consider ourselves developers when we are using a social media platform. And Microsoft I think is another very good example from the previous panel where they provided the accessibility checker closer to the spell checker. And you could see an improvement on accessibility. Relatively simple changes we can achieve much more potential from the authoring tool side and make it easier to produce accessible content. User agent accessibility guidelines for web browser media players and this is an important part of accessibility, the accessibility ecosystem. We heard already a lot about the Web Content Accessibility Guidelines in previous speeches. So good. I don't have to do that. Thank you everyone for having covered that.

But WCAG really defines four core principles; perceivable, operable, understandable and robust. And I think really thinking about products and services from such an angle gets you halfway to where you need to be. It is a mindset thinking how are my products actually useable for people with disabilities. Of course, it defines more specific guidelines and success criteria, things that you can make sure that you achieve. And WCAG 2, by the way WCAG 2 was published last year, was 10 year anniversary. So exactly ten years ago WCAG 2 was published and it has demonstrated longevity for the ICT area. It has been adopted by many other standards. So it -- WCAG 2.0 is available as an ISO, ISO 4500 and that's good if you are not able to, for example, reference WCAG directly or reference the WTC standards. You can reference an ISO standard. It has been adopted in Japan as a Japanese industry standard and Spain and many other places. Also in the famous EN 309 -- this is not a lottery number. In version 1 of that standard and then U.S. Section 508. That's an important step here that colleagues in Europe and U.S. worked on to make sure this is cross Atlantic harmonization that we have the same standards in many, many parts of the world. And we hope

to see more. That's really important to accessibility.

   WCAG 2.1, this was also mentioned was released just this June and was also already adopted in the current version of the EN 301549 and it has a lot of improvements for mobile, people using mobile, people with disabilities using mobile. People with low vision and people with cognitive and learning disabilities. We were hoping to do more than that. I see Jamie supporting that. But we were really hoping to do more in that area and we are looking at more improvements in this area.

   Just to close I want to say that we have many more resources beside these technical standards. It is important to also remember that the web accessibility directive has an all area where Member States are required to provide training and awareness raising. And we employ a lot of resources freely from W3C. You are going to find a lot including awareness raising materials, tutorials, evaluation guidance, things really on how to integrate accessibility in to your workflows, in to your project planning and I think is essential. We always welcome translations. You are welcome to take and use these resources you are trying to apply that in your organizations. I want to mention just very quickly just two projects. One already mentioned from Jorge Fernandes from Portugal. WAI tools project it is a multi-partner project that is focusing on improving the testing and the testability of the guidelines and practice. We now know that many different methodologies and tools have different interpretation. We are trying to align that. We are also trying to have these national demonstrators. Portugal and Norway are part of this project that are demonstrating how these rules can be applied in practice. And a lot of other supporting resources like freely available, open source accessibility statement generator. Again you are welcome to use source code and adopt it as needed.

   Last slide is the WAI guide project which is starting now in January, also funded by the European Commission. It is to develop a lot of resources, curricula, web accessibility curricula to help you create your training programs, your courses at Universities, at agencies or within your national area to support a lot of the efforts that we have heard about, you know, training and certification and so on. Make sure that these are aligned and they are equivalent in what they are providing.

    And I will close with that. Thank you.

   (Applause.)

      >> ROXANA WIDMER-ILIESCU: Thank you very much, Shadi. And let's hear now something about monitoring and implementation of these web accessibility standards from Stein Erik Skotkjerra.

      >> STEIN ERIK SKOTKJERRA: Do we have slides up? Yes. Good.

I am not going to try to make a joke about this. So I'm Stein
Erik. I am at a company called Siteimprove. We provide a
digital presence optimization software. We help you identify and
solve the problems with your websites. That can be different
kinds of issues that can be accessibility related issues, that
can be search engine optimization, analytics, data proficiency,
et cetera. Our vision is actually a world where digital drives
prosperity and equality. And that's why we are here today also
because this is something that is very central to our culture
and central to our values.

   To give just an idea of who we are, we have 7200 customers
currently. They are spread out across 29 countries. Not all of
these have bought our software to work with accessibility. But
the good thing most of them will get it anyway. And that's the
perfect example of mainstreaming from my perspective because
they will need to relate to their accessibility issues if
however they want it or not. At least we will tell them about
them. We have more than 550 employees. And they are all
focusing on the same thing, making the Web a better place. So we
are a big crowd. So we try to make impact wherever we can. But
I would like to take a little different perspective today than
talking about our software specifically because it relates very
closely to the theme luckily. The theme of this session is that
what can Governments do. So why am I here as a private company
representative? For us -- that's all right. Thanks by the way.
So why am I here? I'm here because for Siteimprove it is crucial
that we work on multi-stakeholder approaches. Governments play
an important role but the industry private companies also play
an equally important role in both giving input to developing
policies, but also applying them in practice. The accessibility
field or inclusive design field or digital inclusion field is a
complex one. In many ways it has similarities to data privacy.
It has policies, company wide policies or legislations. We have
assistive technologies and user agents. Most of all we have the
people and this is which kind of sets it aside from many other
sectors, we have the Human Rights perspective. Because the
outcome of what we try to do accessibility is a human right. I
believe although the EU accessibility -- I strongly believe this
will positively affect also private companies and the level of
accessibility in countries in general.

   This is because what we see today is that as soon as
companies start working with accessibility if they do it right,
if they understand the importance of cultural change in the
organization they will start to realize the financial and the
human return on the investment that they are making.

   But this is currently undocumented. We haven't been able to
document the impact of the work that we do in accessibility. So

that -- this is why I believe that Governments being an example, being a driver creating demand in the market for accessible websites, accessible mobile apps will also create this incentive that is important for the private companies to wake up and realize the importance and usefulness. It is also a very common I would call it a misconception that standards are hampering innovation. At Siteimprove we are reliant on standards. Our software is based on web technology. And we wouldn't be able to make such software without web technology.

   We don't have to reinvent the wheel every time we need to code something new because we know that we can look to web standards for guidance on how it should be done. And if we follow these we know it will be accessible by default. We have the signed guidelines and a lot of standards that help us focus on the innovation and save us time and money when it comes to the actual technologies and how to implement things.

   Policies are drivers for standardization. Because if standards are not included in policies, they will not be -- they will not be a demand and they will not be developed. For me inclusive design or digital inclusion is the process and accessibility and accessible solutions is the outcomes.

   Therefore I am actually very glad that we have now got a European standard on universal design that doesn't describe the outcome but the process. Because we hear now today that Artificial Intelligence and other emerging technologies are revolutionizing the technology space. We have -- they don't always follow this development, at least not quickly enough but the process oriented ones do because we can still apply them on new technologies that we don't know existed right now. So this is why I believe we need both because the standards that guide us in the process that tell us how to do things and standards like the EN 301549 tells us what the outcomes should be. And it is useful.

   And I have stolen a quote and I don't even know from who because there are many people who claim to have said it first and it is not me. If you can't measure it you can't manage it. And this applies on both macro and micro levels. If you want to implement policy in a region like the Web accessibility directive or the European accessibility directive, the implementation is completely reliant on monitoring and measuring so that we can improve and guide the decisions that we are making in the implementation process.

   If you go to a company level, a small organization level, it is crucial to measure your success, measure your improvements to be able to manage what you are doing. There are many different kinds of accessibility testing or actually many purposes of accessibility testing. One purpose may be to improve the

accessibility of your websites since we are talking about
websites today. One may be to monitor how your overall
accessibility efforts are paying off, and the third one may be
am I living up to a certain standard, for example, the WCAG 2.0
or 2.1. That answer yes or no doesn't help you. If you make a
certificate, that tells you your website today conforms to a
certain level of accessibility. And I can tell you at
Siteimprove we measure 50 million pages every fifth day to test
how they are doing and change a website from five-day period can
be incredible. So a certificate given one day is not necessarily
valid the next day or at least in a week or two because the Web
is changing and so are our websites. So you need to think
purpose before you decide.
    Which method you use of evaluation. I wanted to share very
quickly some results from a survey that we have been doing where
we have been assessing websites across different countries
that's where we are active. This is for national public sector
websites and this shows that No. 1 is Norway. And there can be
many methodological discussions of how this is measured and
assessed and why this is. But our clear understanding this is
because Norway had a clear legislation for the last ten years.
And another interesting finding is that private companies are
actually doing better on accessibility over all Governments. I
have collected a few resources. I will be here for this
conference. I would love to talk to you. Please welcome to come
by.
    (Applause.)
    >> ROXANA WIDMER-ILIESCU: Thank you very much. And I will
pass the floor to Mikael who is the CEO of TINGTUN from Norway.
    >> MIKAEL SNAPRUD: Norway has a situation which is
resembling what we saw yesterday in Vienna. What we are looking
at here is an idea to connect monitoring with user feedback. We
have been working on monitoring for several years and this is a
fascinating field. We were happier when we saw feedback from
users is built in. We thought maybe we can connect these two and
make something that works better than just doing the automated
testing we have been working on for quite awhile. We think that
Governments and websites owners can benefit from having this
overview. And that users of, of course, they can check your page
and feedback in a consistent way so that it will look the same
from whichever Web page you are sending your feedback. This is
part of the idea that it can be a common approach for doing this
across the public sector Web pages. And, of course, the
developers they can understand more about what are the real
problems for users. We do the best we can to implement tools
that will capture the aspects of WCAG, but still there may be
things that we cannot find that way. And then the user feedback

can be very helpful. So the idea is that we combine three ways, all three justified in the Web accessibility directive. Firstly, the simplified monitoring, so we have a simplified monitoring tool which is available not for download. You can put in a URL and check a page with this tool. And it is done about 2,000 times every month to have one number to give you. And automated testing is low cost. Simple to do and you can actually look at the result in such a way that you find out what is the problem in terms of code on the page. So you can connect it to the WCAG guideline and see what is the message for the developer and what does he or she need to do to fix it. We can use it to produce benchmarking lists. This can be quite useful to drive a gentle push for competing among different websites. We have seen this from some contexts.

   We have also produced an open source tool together with the Accessibility Foundation in the Netherlands to implement an in-depth monitoring support. So this is a sequence of questions that are run based on the content of a particular Web page.

   And finally, we have been working on a feedback mechanism so that users can send in a problem description to ask for alternative variant of the content or describe a problem that occurred that could not be circumvented.

   So the automated test page is an application that's running on a server that you just put in a URL in this case, I put in UAI.all. And we then get report out of that. We can also get a list of website results. In this case we are seeing a list of UK websites in the top and a list of ten we have in Poland with the most let's say room for improvement and this is NSIs. That means National Statistics Institutes. This is one of the selections we have looked at. This was particularly chosen because when this let's say Fake News times it is important to come to the source of information. And this is sometimes the statistics offices of national production and then we need to have it accessible.

   From a benchmarking list like this move on to the pages which have been checked for one particular website. Here we looked at Swedish, statistics central bureau in Sweden. And from this list of pages we can look at what is the problems occurring on one particular page. In this case we see that there have been three problems that we detected. And we can find the code, what is causing the problem that has been found out. And indeed this is run in such a way that it is after applying CSS and JavaScript. The manual testing tool is decided in a way that it is a bookmark. This tool itself is today not fully accessible, but it is only today. And it will provide a list of questions for the user to respond to. It is an easy sequence you can run. And in this way you are producing a dataset that can be combined with an automated testing. Then finally we are coming to the user

feedback. This is a way that will resemble an installation, for example, Google analytics on a page just put in a simple code and a button. And then you have a harmonized way to send your feedback to one database. So you can get an overview of many websites which people perceive as problems on them. The interaction is, of course, designed in an accessible way for the user feedback tool. And it runs the automated test in the background.

Finally I just want to mention that we have now five years' experience from monthly measurements in Qatar. And we see steady improvement from a score of 68 to 86 within this time frame. And it is improving nicely from year to year.

So thank you very much.

(Applause.)

>> ROXANA WIDMER-ILIESCU: Thank you very much, Mikael. So we heard about the legislation and its framework. We heard about standards. We heard about monitoring. What about some solution to all this challenging process, David. So David is the founder and CEO for MAKE SENSE in Israel and the U.S.

>> DAVID ADI: Hello, everyone. My name is David Adi, author and -- now? Okay. Sorry about that. Hello, everyone. Nice afternoon. My name is David Adi. I am the founder and CEO of MAKE SENSE. I established MAKE SENSE in 2016 back in Israel and recently relocated to the United States, and we try to do the same in European markets and other countries based on our success and experience. Presentation. Great.

So I want to discuss about what is actually the challenge. Everyone speaking about solutions and about the technologies and about guidelines, this creates a very big challenge for Governments and organizations. Why is that? Because first the lawsuits that are exposed if people doesn't or organizations doesn't comply with the law. The second it is a little bit complex because websites does not accessibly actually rank in the CSO. CSO is the search engine optimization by Google. And people that suffer from disabilities, several countries disabilities frustrated when they try using the Web. And when they are frustrated the first impact is that the Governments and organizations lose potential customers. They are losing income. And that actually impacts the economy. In that case and based on the information and the experience that we had in different markets the lawsuits expose a gift to the organization, a big challenge. So everyone say why they have guidelines. It is very clear. But sometimes it is difficult. Sometimes it is expensive. Why is that? Because organizations, the R&D have a lot of task. Their core business it is not to make digital accessibility. It is to make the product. And once they need to deal with something they don't have the experience. The

organization needs to buy the resources or to invest more time and effort. Sometimes the cycle, the depth cycle is too long and takes a lot of time and pressure. And now the big challenge is hey, if you don't do it you are exposed to lawsuits and this is it. Of course, it is marketing. And when we have website is not accessible, it needs to be changed often and often. And the accessibility efforts need to be continued all the time. This is exactly where our MAKE SENSE took the challenge and decides to develop an ecosystem that will assist to any Government, any organization to reduce the complexity and the cost that is achieved by the digital accessibility. By improving the productivity and efficiency of the team that is working on accessibility, by giving them the knowledge and the instruction how to do so and to design our platform to be fully accessible to people with special needs can work on our platform to understand what they need and to help them to offer to others how to improve their websites.

So how are we doing that? We create a secure single line of code. When the organization implements the secure single line of code on websites we create a virtual layer that scans websites first and then add to the person that needs assistance and menu. With that menu the user can actually set its preference to what the needs in order to assist this access to his website, to this website. If he is visually impaired maybe he needs to change the contrast and reduce the fonts. Maybe he needs to have keyboard navigation because they have some cognitive issues. And some more other things that we are doing. For blind people or people that cannot use their eyes, we cleaned the noise so the screen reader will give the information much more accurate. So using AI in the next versions that we launch will add even capabilities to create for them the knowledge of what's happening in the image, et cetera.

So that's happening by the end of the user's perspective, but from the organization point of the view they get a full picture about all domains and websites they manage. The issues based on different regulation, European and United States and other country regulations if it is critical, if it is serious, what -- exactly how many violations they are dealing with. We also give the deep zoom in to the issues themselves, enable to the organization to remediate the problems immediately. And that's the main key factor. If you remember I mentioned that if a website is not accessible, the organization is exposed to lawsuits, the development cycle can be too long. So if we provide them a first add approach, meaning solve the problems so end users will not be frustrated anymore. And when you have the resources and priority we will give you the right instruction how you solve. And then you can fix the permanent solution much

more quickly.

Least expensive, do it very fast. So we actually with our platform provide all the knowledge that's needed, the insight information, of course, the training if needed for R&D for the other teams in the organization. We -- power and efficient only to develop the best tool. That's the reason why we also think that all the other tools in the world today in the future will become a potential partner of us and Governments and other users who use our platform will provide more and more information.

People with special needs can work on that platform and provide that I.D. If everyone will think that digital accessibility will come without any efforts or payment it will be a wrong. However, if you will create the platform, will create income for the organization so the organization will put much more forward the technology to their customers or to their websites. And in that case it will actually create more and more job opportunities from one hand. And second the world will become more accessible. A much better place.

We sell hundreds of customers millions of Web pages automatically or manually using our technology. Create for them added value services when they go to the market. We support any kind of platform. As you know the Web it is very, very, very vulnerable with hacking. How you provide a technology that will not impact to be hacked, that is a very important point that any organization and Government must do to put attention to. And, of course, we provide Internet but also intranet as many organizations using internal technology like SharePoints and others. And this needs to be fixed. It is also in the organization itself. Thank you very much. I hope it will be clear.

(Applause.)

>> ROXANA WIDMER-ILIESCU: Thank you very much. So you heard for a solution coming from the private sector. And let's hear from Monica also in the solution.

>> MONICA DUHEM: Good evening. Thank you for being here. Thank you for organizing this experts accessible Europe. And I'm delighted to be here and to share a bit of our experience with ITU to giving knowledge and training on what digital accessibility is and presenting the national web accessibility program Internet for all.

First of all, I would like to share with you my personal point of view. Companies, we heard about accessibility from Microsoft, Samsung, companies are making a great effort to make their ICTs accessible. They are making a great effort to offer us devices, Smartphones, tablets and computers embedded with accessibility functionalities. So the digital accessibility, what we need right now is more than -- of course, tools are great and

solutions are perfect but we need to know what is our
responsibility in the digital accessibility ecosystem. Klaus
said if you ask a developer to put alternative text in Austria
they will know that. Maybe in Austria. I have been working with
tons of developers, that are developing applications, that are
developing websites and have never heard about WCAG and have
never heard about the standards. So I think that all the work
that is doing with the W3C, all these companies are doing in
order to facilitate digital accessibility, the next step is for
us to understand what is our responsibility in the ecosystem.

   Internet for all is -- we will talk about in the presentation,
very good program. So it is like an example. Just a simple
search on web accessibility. And as we can see in the yellow
lines there are a few search on web accessibility on Google. And
when you search for usability, everyone knows what usability is.
But usability and accessibility are really two concepts that
should come hand in hand. We also talk about some paying
solutions or free available tools that we can use in order to
assess the accessibility of our websites, the accessibility of
our applications. I think Google just also launched a free
validating tool for our application Mobile Applications. So
Governments that now we heard about the European directive of
making websites accessible and monitoring the accessibility
there is a lot of developing tools that we can use to assess if
our websites are accessible or not. But I do believe that if we
really want to take a chance we need to understand why these
directives and why this criteria and success criteria are
important. Not only the evolution tool told me so but blind
users need to know and need to have label alternative text.
That's what's important for us to understand what digital
accessibility is and what is our role in digital accessibility.

   So we need the creation of capabilities. And we can go to
create experts on web accessibility like Austria is doing with
certification and with the AAP, with all these examples of
certification to assess our expertise in accessibility. But we
need to know how to crawl before running.

   So what can we do in our Facebook posting? In the Word
document that we are preparing? Make sure all the content is
accessible. So we need creation of capabilities. The
Internet -- international web accessibility program Internet for
all. Five- day program. First day political buy-in. We need
the direction to come from the top of all organizations of the
Government. Why the EU directive is important to all, because
the countries from the European Union need to get in line and
start working on their accessibility and digital issues. So it
is important that the directive and the accessibility comes from
the top. So the first political buy-in is very important because

every Minister is invited to the picture, to have a picture and understand and learn what digital accessibility is.

   Then we have building capacities. We have building capacities in content creation which I think that everyone -- everyone who is not a technical expert needs to know what are our responsibilities in digital content creation because we are -- all of us are working in a digital environment. All of us are socializing in a digital environment. So what are our responsibilities as content creators, as content users in order to make all this content accessible? We have building capacity for developers in WCAG and also we have a self-sustained model. Because it doesn't serve to have accessible websites if Persons with Disabilities do not have the skills to access a website. So also we have -- we need Persons with Disabilities to have the digital skills to use these functionalities, to use the Facebook accessibility functionalities and to really get in to the digital area. So we do have political buy-in in order to hear from the experts and understand what digital accessibility is. Today building capacity for digital content, how are we going to do our word processor? How are we going to do a presentation, powerpoint presentation that is accessible for everyone? How to make them accessible for everyone? For developers and IT guys how to implement WCAG? How to implement the Web Content Accessibility Guidelines 2.0, 2.1? And how to use the available tools that are on the market that are free or not free online in order to assess the accessibility of our websites. And all those tools, four days capacity building we work with end users. We need the persons that are learning to create accessible content that the developers that are learning to develop accessible websites to hear from the users, why is it so important for them, for us to make accessible content.

   Finally we start creating a pool of experts. So in the program we invite academia, members from the academia to learn about digital accessibility, every University. And we did a sample for Latin America Universities, in all the architectural programs we had something on accessibility, physical accessibility norms. Nothing on digital and on website creation. So we need to invite the academia and to be a partner in awareness, because everyone who is learning any digital skills in the University needs to know how to make them accessible. And also the academia and researchers and have impact for everyone.

   Finally the self-sustained model and ITU, thinking about both sides of the equation. The Government needs to have accessible websites and technical experts in order to implement accessible websites. And we need to create skills for the end user. We were talking about technology as a means for Sustainable Development Goals. We need labor. We need to be able to build

in tools, how are we going to be able to do all that? By having the minimum digital skills. So if now we have devices, Smartphone, tablets, computers with accessibility functionalities the next part is to invite end users, to invite persons with a certain age, to invite indigenous, to invite all those areas that are normally outside and outsiders from technology, to invite them to use these accessible ICTs, to use these functionalities in order to have the skills. And we will be able to participate in the economy, in the entertainment, in the socialized world.

   So what ITU is inviting countries to do is to create a national certification for assessment of skills for on one side of how to create content and digital websites accessible and with the funds generated by those capacity, creation, reinvest in the funds in digital skills of the end user. Because at the end in 2020 Europe will have tons of accessible websites, but we need also the end user to know how to use the accessibility functionalities in order to be able to interact with the Government to buy whatever you want to do over the Internet. So it is a 360 self-sustained model. And if we can see the video, please. No. She told me that they were going to put the video over there.

    (Video).

    >> Did you know that more than 5 billion people are using the Internet. What would happen if you can't access the Internet. Being able to access information online is crucial to everyday life. For education, health care and implementing students to be a part of a digital society in general. Persons with Disabilities cannot benefit -- and their content and therefore are not accessible. There was global commitment to ensure that Persons with Disabilities can fully and equally act -- ensure access to information and communication. Countries are developing -- to support the creation of inclusive digital societies globally. ITU has developed Internet for all. A five-day web accessibility program that equips countries and regions with the necessary knowledge and tools to make sure that no one is left behind in the Digital Age. The first step is creating political buy-in. Through an executive workshop for decision makers, participants will develop expertise in ICT accessibility and deepen their knowledge about the positive impact that the digital inclusion of Persons with Disabilities can have not only on their personal development but also on the social and economic growth of their countries and regions.

   The second step builds capacity in developing accessible digital content. Participants will learn how to make digital content accessible in different formats during a two-day in-person training session during which they will also learn how

to pass on their knowledge to others. Validation of these skills will be done jointly with end users and Persons with Disabilities although relevant to all content providers, who share their knowledge within their work environment.

   The third step, building capacity in designing and developing an accessible website structure according to the WCAG Guidelines and principles. During the course which targets Government IT staff Persons with Disabilities will validate the work for usability and compliance. After a two-day in-person training participants will continue working on the accessibility of their respective websites with ITU instructors online.

   The fourth step, recognizing, the role that academia plays in shaping evolving societies ITU will offer the training curriculum to participating Technical Universities. This empowers them to become the providers of web accessibility training therefore building a pool of national experts who will support the public and private sectors to build websites with information and services accessible to all.

   The fifth step, the added value of this program itself, sustainability and the involvement of all stakeholders in the information chain Government and academia through to end users. Through a national certification scheme, but will generate a fund to train the end user in how to use these websites so they may benefit from information, products and services like all other citizens. By empowering themselves through this program and ensure all citizens have equal web access. Governments are developing flat capacity in digital accessibility according to international standards, become local models in web accessibility and inspire other countries to implement similar policies. Lead by example and incentivizing the private sector to follow suit, create an inclusive society by introducing key qualities and ensure all citizens can equally participate in.
      >> MONICA DUHEM: Thank you very much.
   (Applause.)
      >> ROXANA WIDMER-ILIESCU: Thank you very much, Monica. And I know that we are very late, running out of time. So if there is any particular question it is the right time. And if not, I will ask you to give a round of applause to all these fantastic panelists and to thank them all for their contributions and invite them to approach directly during this network. And I think perhaps my colleague Jaroslaw would like to make an announcement with regard to the continuation of the program.
      >> JAROSLAW PONDER: Thank you very much. Dear Ladies and Gentlemen, we are riding to the end of today of the formal part of this. However in front of us there is big excitement. We would like to thank to our last panelists for their contributions. And now what will be happening. Now there is no

free lunch in this world. So that's why during this evening we are expecting a great reception, but before we will go to it we will have the 15-minute ceremony of handover of the announcement of the winners of our regional contest, contest on the digital innovation for -- of solutions for innovations for the accessible Europe. So that's why I would like to thank for the time being our panelists. And I would like to invite on the stage to join me the colleagues who are passionately working with us on this contest. This will include Roxana Widmer-Iliescu, Andrea Saks, Amela Odobasic and Imma Placencia-Porrero. We are still waiting for the dancing roll-ups to get the positions. And we will ask also Carola to bring the trophies.

   Dear Ladies and Gentlemen, let's start. Thank you very much for your patience. We will try to be very brief, but the occasion of this special session is unique. For the first time we are holding the Accessible Europe but also for the first time as the integral part of this platform we launched the regional contest on the innovative solutions digital solutions for Accessible Europe. We have received more than 50 entries from more than 25 countries which have been evaluated. 36 have reached the panel of experts who analyzed those entries in line with the criteria established and published on the website. We had a great opportunity to be assisted by our colleagues from different sectors. And that's why it is my great pleasure to welcome on the stage Andrea Saks who is in the ITU leading accessibility work and also coordinating membership efforts in this field. And let me welcome Amela who is the Vice-Chair European rep -- she is the Chair. So the Chair of the -- okay. I was just now confused. A lot of advisors. But this happens. Okay. So let me call Chair, very important person for the work of the development sector on accessibility working hand in hand with all membership and with all of you in the future on the advice and the studies on the accessibility issues. Also joined by Imma who you know very well leading the accessibility issues in the Commission. And Roxana also from the ITU-D, from the development sector leading the accessibility work in that sector.

   So dear Ladies and Gentlemen, out of the 52 submissions which we received we identified three projects. We will not name which one is winning. We would like to invite first them to present their innovations, for a very short time, five minutes presentation each. And then we will announce who is the winner. And I would like to invite the representative of Felif, multimedia device for blind and visually impaired people. Sir, the floor is yours. Just press the button to speak.

      >> Hello. My name is Jocaf and I come from the company

Felif. These are me and Damion. They are both blind. Mia is a very smart girl who loves math. It took a half hour for her parents to prepare everything before she could start working on her geometry homework. Before Felif it was impossible for them to do this on a tablet. Blind people are enabled to fill pictures and shapes and because of that lots of digital contents out there, they are unable to access. And Felif's goal is to remove that gap.
    (Apologies, captioner has to drop)
<div align="center">***</div>