

Thematic Workshop



Making ICT accessibility a reality: policies and standards on the public procurement of accessible ICTs (International Telecommunication Union - ITU)

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>> DONAL RICE: Good morning.

You're welcome to this session on policies and standards on the public procurement of accessible ICTs.

I'm it Donal Rice.

I would like to open the session and hand you over immediately to Mr. -- beg your pardon, Mr. Kemal Huseinovic, chief infrastructure, enabling environment and E-application department, ITU Bureau of Telecommunication development.

The floor is yours.

>> KEMAL HUSEINOVIC: Thank you.

Ladies and gentlemen, Delegates, thank you.

Please allow me to introduce today's session, making ICT accessibility a reality, policies and standards on the public procurement of accessible ICTs.

This is organized by the ITU development sector.

Any advocate for information and communication technology for accessibility for persons, they're often very concerned with the progress of making a fact that the countries that are most successful with the Persons with Disabilities, they have accessible ICTs at their disposal.

The countries that have, available to government, it has been particularly effective in strategy and innovation, reducing cost for ICT accessibility and creating markets.

Why is this an important issue.

Certainly for the industry, it would be beneficial.

The industry development will not develop an accessible line, they'll develop accessible ICTs.

The ability for companies to have government concerns, it is a powerful motivator for an ICT company to improve its capacity to produce accessible ICT goods and services.

That's why ITU developed a model ICT accessible policy report including a model policy on the public procurement on the public procurement of accessible ICTs.

This policy is based on existing government experience, including those from the European Union and the United States which are represented on this panel.

The ITU model policy calls for an accompanying technical standard and points users to the two major existing technical standards.

Section 508 in the U.S. and standard 301, 549, that standard, this session will explore the latest trends in the use of public procurement policies and standards to ensure ICT accessibility under the moderation of Mr. Donal Rice, senior design visor, ICT center for excellence in Universal Design, national disability authority of Ireland.

Mr. Rice is the co-author of the ITU public procurement model policy and a development of of our online training course on public procurement.

I wish you a productive session and I'm pleased to turn the floor over to Mr. Rice. Thank you.

>> DONAL RICE: We have a dream team with us. It is my job to get out of the way and let experts at the panel present their positions and views and expertise on this topic.

I would just like to maybe motivate the conversation a bit before I hand you over to the first panelist by reiterating fundamental concepts. Disability does not need to be an obstacle to success.

That's no another true than any place else when it comes to information and communication technology. Indeed in the words of Stephen Hawkins, ICT has been an enabler of his ability to study, to write, to promote his scientific endeavors for the past 30 years.

What are we talking about today in this session? Not specialized technology for Persons with Disabilities but really talking about mainstream every day technologies. The ability and the capability of those technologies to enable Persons with Disabilities to use them in an equitable way with other people.

For example, mainstream technologies in this room that already contain accessibility features are mobile phones, tablet computers, laptops, websites, in the outside environment, things like ATM, ticket machines, they're all capable of being -- of having features that are used by Persons with Disabilities. Procurement has a strong financial underpinning. According to the World Trade Organization, 10 to 15% of GDP globally is from public procurement and in the E.U. that figure is as high as 16 to 17% of G.D.P. I think it is fitting we use the analogy of a Swiss army knife when it comes to public procurement policy. It really is a very flexible tool in which to promote ICT accessibility but also to note the market, to do certain things in terms of providing accessibility features in the ICTs that industry produces. Very briefly accessible ICT public procurement can improve inclusions of Persons with Disabilities in education and employment, economic and social life, better deliver value for money for government and public authorities and incentivize suppliers and manufacturers to produce better, more accessible technology and improve all over -- overall quality of ICTs making them more user friendly.

As mentioned, the model ICT accessibility report, developed by ITU has a model policy framework. If you're representing or from a country that's not already looked at including ICT accessibility policy for public procurement this guide provides the nuts and bolts and some fundamental advice and steps to take to achieve that.

Another key reours is the online training public

procurement training resource by the ITU academy, public procurement of products and services.

Without further ado I would like to hand over to the first panelist, Alejandro. His work has been important in the development of many resources but including the European accessibility standards, that we'll hear about this morning and how Alejandro's role within that is to represent the needs and requirements of Persons with Disabilities when it comes to accessible ICTs. I'm delighted you're with us this morning. The floor is now yours.

>> ALEJANDRO MOLEDO: Thank you very much. Thank you to the organizers for this kind invitation. We're glad to be here.

Some words about the European disability forum, EDF, it is the umbrella organization that represents Persons with Disabilities at the European Union. We're an independent NGO. Members are mainly European NGOs representing let's say specific disabilities such as the European Blind Union, European Union of the Deaf, et cetera and also organizations at national level representing a cross-cutting disability perspective in the countries.

That's why EDF tries to represent all the disability groups into one voice and be an advocator of organizations at the European level. Some of our work, social policies, Human Rights, transferability, new technologies and innovation, the policy I coordinate in collaboration, of course, with our members and groups of experts, et cetera.

Why do we focus on ICTs, we know people with disabilities, they face barriers in their every day life in access to culture, pleasure, employment, we have seen our Information Society that technologies are playing an increasing role to play in this sector, in these different sectors. We see ICT as an opportunity to remove barrier, making sure that person with disability can be truly included in all parts of our society. Here we're not talking about -- we're just not talking about assistive technologies which allow greater autonomy for Persons with Disabilities, we're talking as was mentioned, we're talking about mainstream technology. We're talking about smartphone, we're talking about computers, talking about ATMs, we're talking about the web, we're talking about all these technologies that we use in our every day life and hope these technologies can be designed to be used by a diverse range of users. For that purpose we

need to make sure that this technologies are accessible and to be accessible we need to provide all the features that allow people with disabilities to be able to use them.

This has been even -- even recognized by the United Nations convention on the Rights of Persons with Disabilities, the first Human Rights treaty that recognized access to ICT as a fundamental right. We see this huge opportunity to use this new developments to allow more inclusions for Persons with Disabilities. In Article 9 there is a specific mention on accessibility as a general principle of the Convention, but it includes communication and information technologies. We know that when technologies are available and affordable, accessible, Persons with Disabilities use them even in a greater extent than other non-disabled peers.

In a very good report some years ago the ITU, the ICT for the disability inclusive development framework, ITU made a worldwide consultation to organizations of Persons with Disabilities and experts asking them whether the greatest contributions for ICTs, Persons with Disability, the three main answers were what services, mobile services and TV. As you can see, here we're also talking, mainly talking about mainstream technology although we need to make sure that those products and services that people with disabilities use, they need to be compatible with the mainstream technology.

How can we achieve this? How can we achieve this new thing? How can we make sure that the technologies are accessible for Persons with Disabilities? It has been proved and seen unfortunately that self measures, encouraging ICT companies and the private sector to make technologies accessible has not achieved this goal. From users' organizations as well as the U.N. Convention recognizes, we need to adopt legislation, adopt legislation that's mandatory. One of the topics we're covering today, legislation on public procurement. It has a huge impact on how companies develop their products and it can also create a spillover affect that can benefit the users also and also say in the commercial market as well. When the European Union was preparing the new recently adopted public procurement directive, EDF, other Civil Society organization, we pushed hard to prove that the cheapest is not always the best. We need to make sure that public procurement, they take into account also other consideration, environmental, social consideration and we want to make sure that any product or service or facility that our

public authorities buy is inclusive. It has been defined properly and allowed accessibility for Persons with Disabilities.

I will finish, we can go into details in the discussions, but the main idea is to make sure that first we have legislation that is there and on the public procurement legislation it is unacceptable for public moneys to create new barriers for people with disabilities. That's the main idea and then we can go into details.

Thank you.

>> DONAL RICE: Thank you for that user perspective. I think it is worth reiterating at the beginning of this that we're talking specifically about public procurement here this morning. There is many roads to accessibility, to ICT accessibility. Public procurement is I feel a particularly powerful one and that is something that governments have responsibility and control over but it is also something that has quite an influence on the market.

In order for industry to be able to respond to government policy there must be a clearly specified set of standards that clearly describe in an objective way what ICT accessibility actually means. When I started out my career as a web developer I worked with the government as web developer and I came across the web content accessibility guidelines. There were very long, detailed set of requirements that were unfamiliar to me, as a developer, they requested me to do things that I never did before, putting up a description to an image or writing code in a certain way or to make sure that the people who wrote content for the website wrote it in a clear, easy way to understand. The work underpinning the web accessibility guidelines is done by my next speaker, colleague, I give him the entire credit for the web content accessibility guidelines and the other guidelines that W3C produced. My next speaker will talk now to us about international standards in relation to web accessibility. I'm delighted to invite Vhadi for his -- Shadi for his 6, 7 minutes on the work on the W3C from WAE.

>> SHADI ABOUZAHERA: Thank you. As with standards, the Working Group does the work, the staff members get to talk about it.

It is a community effort, a multistakeholder process. I'm delighted to give you a bit of a glimpse of information about the standards.

I'll go right -- jump right into the content after such a generous introduction.

To give you an idea, the web is, of course, one part of ICT. Alejandro mentioned ICT is everywhere and will continue it be more so. We see the web as the predominant interface tool to all ICTs. It has a very, very important role. The web started off actually here in Geneva, was invented not far from here at the research center, that's where the worldwide web was invented and now it is what we call the open web platform. It is said to be a collection of miniature commuters, a website is now not just a staffing document but a programmable interface, you go there, you do stuff, install your applications and you have a platform and think of the social media platforms where you actually install apps and do stuff and create content and your own website inside of websites. That's really incredible. We see the web converging with many different technologies, with mobile devices, with tablets, all sorts of computers, gaming consoles and the Internet of Things we see as the web has been -- the interface through the traditional Internet, we think and hope it will be the interface of the Internet of Things and all those connected objects.

To give you more detail, what's that mean for the web and accessibility for people with disabilities? Obviously the web -- not obviously -- the web is an unprecedented opportunity for people with disabilities to participate equally on the web and to get -- get the same access to information, get the same access to education, employment, all the aspects that was talked about in our daily lives both personal and professional. Boiling this down or drilling down into the standards level, what we have here in an illustration on the screen is the content is in the middle. This is what we call -- this is why it is called the web content accessibility, it is web content, content. It could be a mobile app, something on the gaming console, the television. This is content. It needs to be accessible. On the right-hand side you have the users who are accessing this content using web browsers and sometimes assistive technologies like screen readers that will read out to a blind person what's on the screen.

We also have developers on the right-hand side and developers don't have to be a technical person, could be the non-technical author creating a website, publishing

information. They're using tools and hopefully evaluation tools to check the content. There are standards to govern all of this ecosystem to make sure that the production and also the consumption of the content includes people with disabilities.

I'll go to the next slide and give you more and actually you can go through the bullets.

The first thing, we have the web content accessibility guidelines, this was mentioned several times. This is the international standard for web accessibility and has been recognized by many different governments and organizations internationally. It is available also as ISO/40500. That's ISO references this, it is a cover page that points back to WCAG but it gives it an ISO number for those countries or policies that cannot adopt this directly but needs this ISO version to adopt.

Web content accessibility guidelines is also referenced by the section 508, the current draft of the updated 50238 and David will talk about this aspect. We hope this process will be completed very soon. We will then see to what extent we hope that it will continue to be harmonisation.

WCAG is included in the previously mentioned European standard, the European norm 301 549, if you love numbers, standards, I can give you a lot!

That's the procurement standard in Europe. It's been adopted in Japan as JIS X industry standard and so on in many other organizations and places internationally.

In the past year there's been incredible amount of effort on the entire community, in particular in Europe and in the U.S. to harmonize but to also in Japan and activity in China as well, to harmonize around the standard. The web is by design international, no borders and doesn't make sense to have a website deemed accessible in one country and not in another. There are two other standards very quickly, two others I would like to mention in this content, they're very important, the user agent accessibility guidelines, and we have very difficult acronyms and jargon, user agents, that's anything that acts on behalf of the user and accesses the web content. Simply it is a web browser. It could also be a mobile app that goes and fetches want content from a website and renders it to you or a media player that plays a video online. All of those software, those clients that play or display the web content for you, these need to be accessible

and they need to adhere to accessibility requirements and communicate with the assistive technologies that people with disabilities are using or directly providing the accessibility features. Very simple, to allow the text to enlarge. If the web browser doesn't do that or it doesn't allow another software to enlarge the text, many people cannot see the content on the screen.

Also the offering tools, offering tools, they're everything that you use to generate web content. I mean everything. Traditionally that's the big content management systems that are brought in the organizations and installed centrally or the desktop software to create HTML files but there are also social media sites where you actually -- every user, every one of us becomes an author. We type in stuff and we create contents and those tools often need to support accessibility to make sure that we have an accessible web for everyone. This is a glimpse of the international standards in the field.

I look forward to more discussion later on.

Thank you.

>> DONAL RICE: Thank you for that overview of the very important international standards.

As a web developer, they were very important in the work that I did to be able to give a clear understanding of what it is that accessibility means when it comes to the web.

When I moved into a policy role in Ireland, when we introduced the first accessibility legislation in Ireland I would often get phone calls from colleagues in the public sector who were asking me what do we need to do for accessibility when it comes to ICT? Really what they were asking me was what's the minimum we have to do when it comes to accessibility in ICT. Really we didn't have very clear legislation that was mandating apart from the web, the Irish legislation said make sure that your website, public websites conform with the web content accessibility guidelines we didn't have clear policy. Really I used to look to the U.S.A. and look enviously to the U.S.A. as a model of good regulation when it comes to ICT accessibility, in particular public procurement. Our next speaker, David Capozzi will tell us about the experiences in the U.S.A. David is with the U.S. access board and they're in charge of developing guidelines and standards and supporting the enforcement of regulation in the United States on ICT accessibility. David, the floor is

yours.

>> DAVID CAPOZZI: Thank you.

Before I talk about section 508 and public procurement I wanted to give an overview of the access board, who we are, what we do.

We're a 43-year-old federal agency whose primary mission is accessibility for people with disabilities. We're the only agency in the United States government that has that mission. We have four principle programme areas. We develop guidelines and standards under a variety of laws, if you have heard about that tall, you have heard of section 508, that's a part of the rehabilitation act. We also developed the accessibility guidelines for the Americans with disabilities act for buildings and facilities, all types of transportation vehicles, for an older law, the architectural barriers act applying to federal buildings, communications act for telecommunication equipment and fund the patient protection and affordable care act or as everybody called it obamacare for medical diagnostic equipment like x-ray machines, mammogram machines, CAT scans, people with disabilities have an easier time to transfer on to and off of these devices. We provide free technical assistance and training in all of our work.

We have a small research programme and we enforce the old law, the architectural barriers act applying to federal buildings.

Now about section 508. If you have heard of Section 508 you probably heard about the standards for Section 508. The law itself is more than just the standards. Congress passed the law, Section 508 in 1998. That directed our agency to develop standards for what was called at the time electronic and information technology which you all refer to as ICD which we'll refer to as ICT in the final rule.

The law does more than just require us to develop standards. As we have heard several times already, it is not about assistive technology, it is about mainstream technology, it is mandatory so whenever a federal agency procures, develop, maintains or uses information communication technology that agency has to buy the product that complies with our standards. It is vigorous. It requires technical assistance, our agency and the general services administration provide technical assistance to government agencies across the country. There's an every other year report from the

Department of Justice that's required to be done on kind of the state-of-the-art, what are agencies doing, how well is this working, what are the gaps? Then finally, probably most importantly, there's an enforcement section allowing individuals to file complaints with agencies and file lawsuits to enforce their rights. It is multipronged, not just about standards.

The law was passed in 1998. In 2000 we issued our first set of Section 508 standards. At the time there was one on the books, we didn't reference it but mimicked it, we picked up other provisions and some we didn't. Around the same time the Europeans had issued a mandate called mandate 376 to develop a European norm on the accessibility.

We have been working ever since then for the last 12 years with European Commission staff to harmonize our requirements in the U.S. with those that were developed in Europe. The current European norm EN301 549 is largely consistent with a draft we wished in 2011. It is kind of convoluted but essentially in 2011 we issued a draft, and this year we'll issue a final rule that will be different than our draft obviously, and will be different than the European norm that exists today. Harmonisation takes time, a lot of effort because things keep changing.

We're constantly monitoring the situation. We have excellent working relationship with folks in Europe and our next step is to finalize our updated section 508 standards p we will do that in October. Then continuing our harmonisation efforts to hopefully, eventually develop an international standard that everyone can point to. I want to talk about some of the challenges we have faced in the last 18 years. The law was past in '98. I'll highlight a couple of them.

The general services administration has the technical assistance role. They looked at all of the procurement actions that federal agencies were taking that were public for ICT purposes. Half of the contracts actually specified specific 508 provisions in their practice. Are we doing a good job? Sort of. We're doing half of a good job.

Some of the contracts are specifying 508, but a lot are not. We still have a lot of work to do. Compliance rates for websites are not where we want them to be.

There is a study that was issued in 2012 that showed between 61 and 95% of federal websites weren't compliant and a number of issues were things that you could guess, if

captioning on videos, so we still have work to do in that.

One other thing that I wanted to touch on in terms of implementation, the administration issued a strategic plan on section 508. How to make things better. One of the things it required is that agencies report to the administration, to the White House on how they're doing on several consistent measures so that the administration can see what agencies are doing over time. That was a very positive step. Accessibility statements are required to be placed on all government websites. Agencies are also required to have chief information officers that deal with accessibility, required to have a 508 coordinator. Lastly I just wanted to talk about some limitations that we have noticed over the last 18 years.

First 508 only applies to the federal government, does not apply to state governments, does not apply to the private sector. McDonald's, restaurants, theaters, not covered by 508. Complaints can only be filed with the federal agency that you want to complain with.

If I have a complaint with the Department of Transportation, I file the complaint with the Department of Transportation. There is a saying in the United States, it is like the Fox guarding the chicken house.

Does it work so well? Maybe not. There may be a better opportunity for more vigorous compliance.

Finally, no central authority to ensure oversight. It is spread throughout the government, it has positives, everybody has ownership, negatives because it is a finger pointing exercise and no one is in charge. Those are some things that we have learned over the last 18 years.

>> DONAL RICE: Thank you for the brief overview of the work of the U.S. Access Board. This is not a -- this is something that I have observed in 20 years I have been involved in the field, it is that very many technology companies who sell their products globally, but also who sell their products to the U.S. federal government contain accessibility features that would not be there if not for Section 508. I have two different brands of laptops in front of me, both contain accessibility features, both in their physical laptop itself and also in the operating system and software within it. Arguably I would say a lot of those accessibility features would not be there had it not been for the consistent effort of the U.S. Access Board to define clear standards and guidelines for use in public procurement in the

U.S.A. That's my claim. It is not one that is ever made by the U.S. Access Board. I think globally we all tend to benefit from the use of standards and in my own experience, in working with public procurers in the public sector in Ireland there is often a reluctance to put in a requirement that, you know, the 10,000 PCs being bought for schools in Ireland should have accessibility features in them. Maybe no one was going to respond to that tender. In fact, most of the global manufacturers of computers are already including accessibility features as was said in the very beginning, ICT developments don't develop an accessible version and inaccessible version if they're required to, they will produce an accessible version full stop and that's then what is sold in the market.

I think it is fitting that we look to another region in the world to see what the approach is there with regards to standards development and regulation and policy in their public procurement. I'm delighted to have Inmaculada with us this morning, deputy head of Unit, Rights of Persons with Disabilities and Director General of JUST and the European Commission. She's been driving many innovations that's been undertaken by the European Commission, both by supporting development and standards in accessibility but coming up with considered, thoughtful legislation directives and accessibility specific legislation and we're going to hear on the work that's happening in Europe.

>> INMACULADA PLACENCIA PORRERO: Thank you very much for organizations this, ITU, and for the invitation to be here with you today. Let me say that in the meantime, I move from the commission and now Director General of employment, but indeed I continue doing a similar job. I would like to share with you what we're doing at the European Commission in order to advance on accessibility of ICT. I would like to provide you with the context in which this work is happening, trying to explain why are we doing what we're doing.

First of all, many have referred to the U.N. Convention on the rights with Persons with Disabilities, the 75 Member States are a party to the con advantages the three remaining Member States have seen the -- I think many countries from which all of you are coming are a party to the Convention. This means that we need to -- we have taken the commitment to implement that convention that contains obligations on accessibility, also as explained by the previous speakers. It is important to say that while trying to implement the

obligations of the Convention Member States organizations are putting on the table more detailed rules, very detailed rules, those mentioned before by the different speakers, and those risk of being very different in the absence of joint actions and that part of the work that we're trying to do is harmonized. Having common rules and in Europe, having common rules international, and the reason for that is -- there are a number of reasons for that.

First of all, investing in different rules is very costly. It is very costly and there is no need. ICT is global, particularly in the area of ICT, it is global, similar requirements are all over the globe and we need really to join forces to have a common set of rules and have the efforts on the implementation of the rules rather than on the developing new rules.

The second -- another element, it is that industry when it is -- we have the ones at the end, they implement the accessibility requirements in the products and services. If they invest on having different rules, much of the resources, they'll go into that. It is much better to have -- for them to have one set of rules and to do it properly. One set of rules that would also ensure interoperability of the technology and the third reason, it is for the user to have certainty of what they can expect.

We're trying to do that at the European level by having common legislation that would also ensure to industry that when you fulfill those sets of rules those products and services can matriculate in the European market and if will also make the European industry being able to compete, to function at European level. Of course at the same time we need to see our obligations to the Convention.

The accessibility obligation also has been said by previous speakers, it is about mainstream technologies. Let me say obligations, the purpose of having that accessibility legislation, it is to fulfill the right of equal access. Accessibility in itself is not an end, the end is to have equal access. Accessibility needs to be in the context of the provision also of this equal access, the rights that Persons with Disabilities have by the Convention of equal access, they -- the provision of discrimination, and it needs to be complemented with reasonable accommodations that has the personal assistance and support. It is in this context that we need to see the measures that we're taking for

accessibility.

I will give you a little overview, a flavor of the rules that we're having at European level or that we're proposing and currently discussing with member states to fill in that picture of access, equal rights, equal rights to equal access and then the different elements.

First of all, we have made proposals for anti discrimination legislation that's imposing an obligation of accessibility in that context. Those rules are under discussion with Member States. I have put question marks in the slide.

Then we have public procurement rules. A lot has been said about the role of public procurement. Let me highlight that in Europe today since last month it is compulsory to buy accessible. It is compulsory that in the technical specifications to describe the accessibility requirements of what's going to be bought. In addition, and this is an important point where we have a lot of hope, there is a possibility to compete on accessibility with other -- to use among the criteria for the assigning the tender, not only the price so what is cheapest but also what is most accessible, to find the balance between a number of elements and accessibility, it is one of those elements.

We also use accessibility for the structure of funds, those are financing possibilities, for example, for regional development and accessibility is also an obligation. There are rules in transport, there are rules on external action, development corporation, the development corporation requires to observe accessibility when expanding the European fund. There is currently also a proposal to make all public sector, a big number of public sector websites accessible, that's being discussed. The latest, the latest piece of legislation that's been proposed, it is the European accessibility act and I will in the next slide explain to you very briefly the content of that act. For that, let me tell you, to underpin all those rules, in order to facilitate the implementation we're developing a number of European standards that would be voluntarily used in those contexts and to contain more details of accessibility. The first, it is 376, that's the one that's been referred to before that contains accessibility requirements and that can be used in public procurement. It can be used for other purposes, for the other legislations but also for procurement. They're highly harmonized with the U.S.

standards.

We're also developing the standards in the area of the built environment, I mention that in content with ICT, there is a component, when talking about the built environment, messaging systems, we talk about the use of cellphone terminals, there is a component there, that it needs to be on accessibility, that needs to be addressed.

Mandate 473, that's about design for all. It is about whenever we design standards, whenever we develop the standards for the next generation of technology to already think of what is relevant for accessibility and to put it already on those standards. In addition, we're trying to develop standards that provide guidance for manufacturers and service providers as to what do they need to do in the process when they manufacture and provide the service so that the end result, the product, the service, would be accessible. As I said in the last slide, I will briefly describe -- okay. We have done so. Okay.

We're going to the accessibility Act. There is two legs. The first leg, obligations are directly on manufacturers and service providers on the number on products and services. It contains obligations on computers, it contains obligations for mobile phones, for televisions, digital television, but also for the services. It contains obligations for audiovisual media, Telecoms and also for example for self declaration terminals. The accessibility act contains many functional requirements and those are then used in the legislation, particularly in the public procurement. It is important to use the same requirements for putting the obligations on the economic operators and on the public authorities so that in the end it would be a match between the supply and demand. It uses several possibilities for enforcement, first the self declaration and then public authorities will do market surveillance, we have to check and finally allowing for the possibility of the user, the consumer with disabilities to claim the rights in court.

We're starting to negotiate this with the states and we hope soon to be able to say that the legislation is adopted and that it will be -- it will be implemented. As I said, having the standard underpinning on these, having -- setting the standards for the private sector, for the public authorities, when they buy with procurement goods and services, products and services, it is an essential component

of the policy of the strategy we have following.

Thank you.

>> DONAL RICE: Thank you very much for that overview in the European legislation. Some very different approaches to what's happening in the U.S.A. which I think as you emphasized in the final words there, the importance of using common standards, complete standards that are harmonized with other standards. It is very important. I think -- our next speaker is representative in telecommunications union, Mr. Kawamori, a professor at the University in Japan, representing the ITU this morning, Keio University, he's with question 26 on the accessibility and is also a Rapporteur. Mr. Kawamori, the floor is yours.

>> MASAHIITO KAWAMORI: Thank you very much.

Thank you for the nice introduction. It is a great honor to be here this morning, to be able to speak in front of you.

I would like to speak a little bit about ITU-T and question 26 and what we're doing and with respect to essentially with procurement, with accessibility.

It is symbolic we're meeting in this room because this is named after one of the engineers of telecommunications, Alexander Popov, he's very credited with being the inventor of radio. ITU, we have celebrated the 150th anniversary last year. It has been 150 years since we have ICT. If you look back, ICT has grown tremendously, it started with radio equipment and now it is everywhere. We can't live without it. It is very important that ICT is not just for accessibility, we're talking about ICT for accessibility but we're talking accessibility for ICT. I think it is very important that we're not just talking about specific technology for accessibility but for anyone, accessibility technology for everything.

Within ITU-T Question 26, it is under -- within a Study Group, Study Group 16, which is mandated with multi media study and multimedia is actually everything that's human interface related to because everything that humans do as far as perception is concerned is multimedia. What you see, what you hear, what you touch, they're all multimedia. As long as we talk about human beings dealing with other human beings we're dealing with multimedia. In that sense it is very appropriate that this question dedicated to accessibility belongs to Study Group 16. This group is specifically designated to deal with accessibility for ICT services,

especially with multimedia with Persons with Disabilities. We have been responsible for developing the multimedia technical standards, accessibility needs of persons with various needs, not only with disability but also with age so that people with -- elderly people, older people, foreign people, that they may also need some accessible features. We also reviewed accessibility features in other sections, like ITU-R, other Study Groups and we're trying to promote the use of these technologies and standards features in practice, not just preaching but also trying to practice what we do.

For example, you can see the captioning just in front of you, this is how we do our meetings. Every time we have our meeting of question 26 we always have captioning because that's necessary and mandatory for people who cannot hear and we invite them to participate in our discussion. It is clear that we closely work with Persons with Disabilities organizations such as the World Federation of The Deaf, the European Blind Union and also other U.N. agencies such as World Health organizations, WHO.

Next slide, please.

I would like to introduce some standards that we have been working on and published. One of the things that's more relevant to procurement is this 790, it is telecommunications accessibility guidelines for older persons and Persons with Disabilities. It gives a general framework for accessibility and also we have V.18 for text telephony and 703, multimedia conversation service description for relay services and other technologies. , total conversation.

We have consented and approved a new recommendation for 702, for IPTV accessibility profile which gives profiles for different needs that the persons of disabilities may require. Also we have published technical group papers for guidelines for accessible remote participation which is actually implemented in this meeting and also accessible meetings such as closed captioning, sign language, audio description as well as accessibility checklists so that companies, organizations that are interested in checking whether their practices are in accordance with what we have promoted, they can check.

I would just like to say a few words on recommendation 790, I just mentioned, it is a general guideline for planning, developing, designing and distributing telecommunications equipment, software and services to ensure accessibility for people with various abilities. Actually this is a guideline

that could be used for procurement. It gives guidance on the ways that accessibility may be incorporated in products and services so that companies or organizations or governments can use this recommendation as a guideline or guidance for procurement. It has been harmonized with ISO standards as well ETSI standards. A draw back of this recommendation, it is that it has become a little old and as mentioned we have been working on new standards. It is good timing for us, ITU-T, to look at this, review this f.790 again against the contributions proposals from U.S., 508 and the European norm to update this kind of -- this accessibility recommendation.

Harmonisation is important and I just suggested, this may be a good work to work towards harmonisation among the different standards. ITU-T can provide a very good forum for that purpose.

Thank you very much.

>> DONAL RICE: Thank you. Thank you.

You may think -- you thought he was the last panel speaker and you're mistaken. We have another speaker who was very disappointed he could not be here with us today. That's Gregg, director of the Trace R & D center from the University of Wisconsin and University of Maryland. As long as I have been involved in the field, I have based a lot of what I do on the work that Gregg has done. Accessibility, it is a little bit of a movable feast. Although we're -- the panelists, many of the panelists are involved in harmonizing standards to make sure that regulation makes sense, to make sure that there is clear requirements for industry to follow and to make sure that technology is accessible for Persons with Disabilities, older people, it is also important to keep an eye on what's happening. What technological developments are there, and where technology is going within society.

To that end, Gregg has prepared a brief video -- prerecorded video presentation for us. It is not live, but we only got it a few minutes before coming in. It is kind of nearly live.

We're going to listen to what Gregg has to say around where technology is, where it is going and why we need to consider things such as public procurement and standardization.

>> GREGG VANDERHEIDEN:

>> DONAL RICE: We may kickoff the panel discussion. We have listened to presentations for an hour now. I would like

to invite participation from the floor.

At this point, do we have any comments, questions from anyone on the floor to any presentations that have been made so far? A question?

I would like to invite you, you're from Australia, you have a comment, a question, I know you can --

>> Thank you.

Hello.

I'm Gonola from GSA from Australia. While we're waiting for Gregg's presentation I thought I would take the opportunity to talk a little bit about an Australian case study in public procurement.

Consumer advocates have been lobbying for a number of years for the Australian government to include accessibility criteria in public procurement and certainly we have done considerable work in what's happening in our countries with public procurement uptake and we have that data that we have give ton the Australia government. They have looked at in regard to what their current situation is. We have their preferred suppliers and we found that probably around 60 to 70% were complying to section 508 in most cases.

In Australia there is a centralized way of procurement through the Australian government information Office of The Department of Finance and they're supplier panels that are selected according to a number of criteria every few years.

Because the government felt more confident in including accessibility criteria and public procurement they started off by a request for tender for the hardware panel of suppliers to incorporate a clause stipulating that consideration would be given to suppliers who abide by Section 508 or the European norm. That was the starting point. since then standards Australia have just this year been commencing a process on transcribing the standard to an Australian standard. We all know it is better to harmonize as we have heard. There are some issues in regard to Australian code which need to be considered, but at this stage it looks good and we have the support to do so. By the end of this year standards Australia should have a particular standard for accessibility in public procurement and I'm presenting this as a case study because there would be a number of other countries here and everyone does it differently. We found that with the Australian government and certainly when the key procurement officer learn directly from international experts what the itch

indications are for public procurement and including accessibility that made a huge difference.

I just present this as a case study, and thank you.

>> DONAL RICE: Thank you very much.

I think the research you have done in looking at different policies around public procurement internationally is -- it is a very useful report and should be easily foundable online if people research for that.

I will echo the experience, sometimes you have the best standards, everything is clear but if the public procurer, they're not aware of that, that's key, we'll talk about later about capacity building within a country so that people are aware of what the obligations are under policies and they're aware of the standard and how to use them and how that will impact their tendering processes. Thank you.

You have given me time to swap out a computer. I will try this again. Thank you again.

Hopefully this will work.

If it doesn't work this time we'll leave it alone. I will be disappointed for Gregg because he was up very late last night doing this. We'll see how we do it here.

>> Sorry I was unable to be with you but my students are doing final presentations. I had to be here for that. Donal asked that we make a few comments focusing on where we are, what needs to be done to finish up with the requirements and what we should be doing next.

Let me touch briefly on each of them in that order.

I'm not using PowerPoint because that won't work for those that can't see, and for those using captions or the interpreter, they can't see what I'm saying and still look at the PowerPoint at the same time. This is just an example of one of the problems we haven't yet figured out how to do, how to solve but we do anyway.

Where are we? We're in a turning point. kind of a perfect storm. In short, we're rapidly reaching a point where, A, access to information technologies is mandatory for independent living, for participation in our society, but, B, we're unable to actually provide access to ICT by everyone. The result is we're unintentionally but systematically excluding people from the emerging society that we're creating. People used to be able to participate, they used to be able to opt out of technology if they didn't like it, couldn't use it, it was a disadvantage but they could use it,

live it, live independently, get jobs, et cetera, but we're getting to a point where we're excluding them as we add technology and interfaces to everything in our environment, travel, education, even things in our home are now getting more and more digital interfaces. We need to be able to figure out how to get access and provide access, not just to the mainstream technologies -- I'm sorry, mainstream disabilities but also to the people who are not only blind but also may have another disability or may not be technically oriented so that they can use screen readers which can be quite complex to use if you have ever tried them. We need to figure out how to get these access features built into the products.

We did a study, trying to find out why there's not more Universal Design, why there is not more activity by industry to build accessibility into products and we're actually doing this as regression study, we would take different factors, figure out how much of the factors contributed to the decision, et cetera. In the end, we found out it was basically one factor, that was product. If they could not either make money or save money, then it either didn't happen or sometimes there would be a champion to make it happen but then it would disappear in the next round. This shouldn't come as a surprise.

Most of these companies are publicly traded companies. We, everybody here who has stock or a pension are the ones who are the owners. We buy the stock, we ask our pension managers to work on, this we always ask them to maximize our returns. If that's the reward, that's what they're awarded for, then that's what's going to happen.

Interestingly, regulation is society's way of taking our social values and building them into the business equations of companies. If we create regulations that either costs money if they don't or if it makes them money if they do, then we can make it so that it is more profitable for them to make products that are accessible.

The companies, they're full of wonderful people -- they're full of all kinds of people -- there are lots of wonderful people in companies that care a lot about this. The companies themselves, they're machines. What we'll find, the way we programme the machine to operate is the way that it will operate. We need to figure out how to create -- if we'll create regulations, this is powerful, ones

that are doable, ones that will be effective, and then we need to be able to enforce them.

508 and 301 549, that's two examples of what we call pull regulations standards that are used in the regulations.

They make it so that in the purchase standards, the purchase requirements, that it becomes motivational to companies to follow them. If they follow them then they will make more sales to the companies and also states and governments that require compliance standards as part of the purchase process. We have found that if you don't actually require them, they won't actually happen. We need to make sure that we don't just talk about them or create them but we in fact enforce them when we're done.

Both 508 and 301, they're great steps forward. They're largely identical. They have a heavy emphasis on technology neutral so that they'll last over time, better than some things in the past have. Currently EN305 549 is weaker on hearing impairment and speech impairment than 508. HD audio for example is not required in the 549 and it is in 508. Also a last minute edit done over the objections of the disability groups that pretty much neutralized the realtime text provisions that are needed by people who are hard of hearing for captions and for telephone calls and for people that have impaired speech. The efforts are underway to fix the problems that came up with some of these edits and also to harmonize the 508 and the 549 going forward.

Harmonisation and interoperability, it is important for consumers and for industry. For consumers it is important that they be able to move around between countries if they go overseas, the phones, they should still work, still have accessibility. We need to be able to communicate freely become and forth between the continents and for companies, they need to have the standards set that they can use so that they don't have to create different kind of phones for different parts.

Going forward, it is important to note that neither make products accessible by everyone. They're what we call minimum accessibility standards. Many people will still not be able to use ICT even if the products did everything in the standards, common language and learning disabilities, they're a particular difficult area, what is good for one person may not always work well for others or may actually make it less good for others. Sometimes that's cited as a reason to not

work in that area. It is not really a problem unless we think that we'll create one size, one interface that fits all. We don't believe that for clothes. We don't believe that for houses or cars or anything else. There is no real reason that we should talk about that being a problem here.

What is a problem, if we make a product that's flexible enough to meet everybody's and we put adjustment on it, sometimes it is confusing or too difficult for people to figure out.

We need to do two things. We need to focus on personalization and flexibility. Products need to be flexible and we need to find a much easier way to make it so that we can change the way the -- the ways that different products behave, an ATM machine, a ticket machine, computer, anything else that a person encounters so that it matches -- it is a one size fits one with a automatic personalization and we have to figure out how to discover, create and disseminate better solutions for those groups and people that we don't yet have good tools for.

I'll wrap up with that. There are two things, two big efforts looking at personalization, and creating new solutions, and to look at those you can go to gp11.net and then prosperity for all -- prosperity4all and then look there, look to see the work being done internationally to work on these types -- these next generations of solutions.

Thank you -- next generations of solutions.

Thank you.

>> DONAL RICE: Thank you. Great. Thank you for your patience in waiting for us to get that video running.

I think it was worth it. It raises another couple of points. I think one of it, what Gregg calls the perfect storm. For a lot of people they're facing a situation -- we're probably all technological advocates and enthusiasts in the room and for many people that are not technologically savvy, they don't want to use it but are forced to in many situations, to now use technology and what Gregg is advocating for is something that's so intuitive, easy to use that anyone can use it. What he's saying I think to paraphrase him, is that this is not about making something gloriously complicated so that it can do all things for all people but making it simple for that one user what, he calls personalization.

I think we have heard quite a lot about standards. If

you haven't already, if it is not already embedded in your brain, we have talked about section 508 and web content accessibility guidelines and 549. I would like for a couple of minutes to maybe elevate the discussion out of the trees and to ask the panel in terms of policy development what would be the two, three things that you think a country could put in place in order to have an accessible ICT public procurement system in place. What are two, three things? We have spoken about the ins and outs of the standards. Maybe we come back around to that by the end of the presentation. What are two, three things in the experience of the panel that really, really need to be in place, if nothing else is in place, what needs to be put in place to at least start the process for a country to start developing or embedding accessible ICT and the public procurement policies and practices.

Who would like to take that first.

>> DAVID CAPOZZI: A couple of ideas. One, you can't get away from standards. You have to have clear, measurable standards. There are two that you could point to right now, 508 or the E.N. which is what Australia did in one of procurements.

Secondly, you have to have it mandatory. Third, an enforcement mechanism for when things don't work.

Finally, there needs to be technical assistance to help people when they don't understand something.

We wrote our accessibility guidelines for the Americans with Disabilities Act back in 1991. It is 25 years later. We still get plenty of technical assistance calls on what accessibility means for the build environment. One thing I think about a lot in this area, I think for the layperson, technology for ICT, it is hard to understand. What are the barriers? People kind of get a ramp into a building or a parking spot in front of a building for a person to park so that they can get in, but explaining technology barriers is a lot harder. That needs to be a part of the education as well.

>> DONAL RICE: Anyone else object on the panel want to? Yes.

>> ALEJANDRO MOLEDO: Thank you.

I fully agree with what David just said. I would complement it with -- to address mechanism for users and also it is very important that public procurers understand had the importance of this and also because they will need to access the tenders and verify in the self-declarations of those

companies that want to send their products and services, they have to access whether it is true or it is wrong or -- or which one is better than the other. It is very important that we build the capacity of public procurers and hold to -- deal with this matter and incorporate this into the -- in their daily work.

>> INMACULADA: It is great to have the panelists, I agree with them and then I can just add one consideration. That's the issue of competition. We need to try with procurement to put industry to do something that they do very well, that's to compete with each other to sell the products. The way in which procurement is currently done, the main element of the procurement, it is as you described what you want to buy and you fulfill it and then you sell. There is an element of competition, and I refer to it before about buying the cheapest one. Industry knows they have to be careful with the price because even when fulfilling the requirements, if the product is -- if the solution is too expensive, they may not be the ones selected.

If we incorporate in the element of that selection, the most accessible, to have a competition on accessibility together with the price, there are other elements that procurers can put, like moreal or lower energy consumption F we find a place for accessibility in that competition, then the industry, they'll compete for accessibility and then when you have competition on accessibility, you will have better -- better -- more accessible, more accessible products. That element of competition in the procurement is one thing I would like to add.

The other element I would like to add, how to share the responsibilities in the process of being accessible. In the procurement rules, depending on where we're looking at different places in the world, what happens if requirements are not fulfilled? Who is responsible when there is a problem with the accessibility of the product or the service? Is that the public authority, the industry, both? This is a complex issue. When you come to the enforcement of the law it needs to be clear who is responsible and have a shared responsibility. If the only responsibility is the public authority, then, okay, there is no incentive on the other side of the industry to be fully correct. If it is only for industry, there is no responsibility on the procurer. Why should they P buy accessible if they don't buy accessible,

nothing will happen to them. Find a balance of the responsibility between the buyer and the seller to put it that way is the other element I would like to share with you.

>> DONAL RICE: Thank you.

A question from the floor.

>> AUDIENCE: Can you hear me? Can you -- okay.

Thank you for everybody, for the interventions. It was very, very important. It is for the Rights of people with disabilities and the head of the ITU on people with disabilities, what I need to say is that all the presentations were very good. I would say they're very good. How people with disabilities, in a third world, how their access is -- what is the participation, in the WSIS-14, I was presenting and participating in a forum in Morocco and have been speaking about people with disabilities in these regions. There's no response. There is deaf air from the authorities, from the private sector, from even some advocates, all who claim they're advocates because they have had their rights but they don't think about the others. Even those within people with disabilities, but in order to implement what's been said we need from you, from the persons here, we need you to defend our rights in our own countries.

I'm very sorry to tell you this. We have the ability to -- I can use my voice, but how come -- we have the speaker recognition, and I ask you for the first time, I'm now 37 years old, I have asked for -- I ask for help. Nobody answers. I ask for help with my smartphone. I want -- I want the University, I want -- nobody -- nobody in my country say congratulations. At the last moment, as you heard me say, it is an honor, of my country, to say thank you and give me \$500 a month -- euros, sorry.

How can I be here believing that I will have the -- those with and without disabilities, it is -- it was extended through this for all. I had the pleasure to be invited on the floor in Geneva from the U.N. United Nations to make a speech. I said I have nothing to say. I'm happy to be here to speak about the voices of the persons who are behind me, believe me, there are so many Persons with Disabilities who are working in ICT and they're hidden. They're making miracles and they're breaking it and I'm one of them, humbly.

When you ask for examples, for -- when you have the meetings, I want to tell you from this stage, because this -- it is what's been experienced, it is the access that's

so marvelous and we're referring to the European Society, the American Society, so on.

I have been to the United States to defend the Rights of people with disabilities and I have been to the U.S. in 2000. For the first time in my life it was so nice of an experience. I tried to use the computer. My friends, my assistant, Michael, he's telling me yes, you can do it. I tell him, please, say it first. And as a normal person, he had so many problems in trying it. After that, when they came in front of the computer, it was the first time to try to say it, so on, I couldn't because of the movements of my hands, the movements, I couldn't even write a word. I contacted through the University the company that produced this kind of University, asked how much it cost, they say it cost \$5,000. I said what about the other computers? Only \$1,000. What's the difference? Only this. How come companies are -- I mean, taking care of people with disabilities and at the same time their -- this is not only in America but everywhere. In Japan, in Europe, everywhere we find that -- this here, can I use it? No. It wants to have my privacy, my life, my private life, I wish to be able to call my friends and to speak to him or her without the need to ask her to take it for me. I need to have some independence.

I don't want to blame you, no. It is just to say what is in reality. It is just to say to you how can we do this together? In speaking to yourselves, all of you, it is so important. ICT, ICT, it is to assist in communication. Believe me, sir, I speak to my friends all over the world, believe me, all over the world, er in Japan, in South Korea, in the United States, I'm awake at 3:00 a.m. in order to do this. I want to give their voices, the voice to the voiceless, to give their suggestions, they're dreams, their hope, what do you say, their ambitions to do something. You have the opportunity to -- to have the floor ready for him, but believe me, there are tens, maybe hundreds of Stephen Hawkins around the world where they're kept in the shadows. What can we do together? Speaking to you as my family, believe me, sir, believe me, all ladies and gentlemen, this is what -- this is not a matter of -- I'm speaking to you, but I don't want to leave this room and it is always that I have -- that I have a sense -- you're the -- it gave each of you, each of your speech, it has a -- see, it has -- one minute. Okay.

I can go on. I know. I'm sorry.

I wish that my message has reached you and I wish that we can shake hands and I wish that you can really protect us.

Thank you.

>> [Applause].

>> DONAL RICE: Thank you very much for that really inspiring, heartfelt, lived experience that you have told us about. So many things go to the heart of exactly what it is that can be achieved that can be achieved together. This isn't something that any region, country, person can achieve. I know by the body language of my panelists that you're inspiring responses in them. I want to hand it over to my panelists to respond to your comments.

Thank you very much.

>> SHADI ABOUZAHERA: You have made excellent points. It is important you're here. That you're raising these points.

I myself, I originally come from Egypt. I did have the opportunity to grow up abroad. I'm very in touch. I have gone many times to Morocco, Tunisia --

>> AUDIENCE: We're going to collaborate

>> SHADI ABOUZAHERA: Many countries. This is where I feel that accessibility really makes a difference, not that it doesn't make a difference everywhere else but really it is a matter of -- yeah -- more fundamental. Let's put it that way.

It is a very complex issue, of course, as you're very well aware and as Donal said, it is not I think one solution or one thing. Some of the important or relevance of what we're saying from what I see from my perspective, the availability of harmonized standards, international standards makes things accessible by default.

A lot of the computers today, even though they're very expensive still, they have built in software, built in assistive technology that was previously much more expensive. The availability of open standards makes the availability of open sourced software more available. Screen readers that are basically developed by two people on a small island called Australia the MBDA, it really completely changed, you know, the whole arena for people who are blind.

Of course -- and this is exactly I think what Gregg was also talking about -- the mainstream disability, looking beyond the mainstream disabilities, trying to tap-in to there as well. It is a community effort. There are things in terms of how we standardize, how we provide the technology and try to make it more affordable and more available to everyone is

one step, one piece of the complex issue that you rightfully raise.

>> AUDIENCE: Thank you.

>> I completely agree with what you shared with us and with the response. Shadi, he mentioned actually the three elements that I repeat over and over when I talk about technology, that is the need for availability, accessibility, affordability. I want to make sure that the technology reaches everybody that needs it, then we need to make sure that that technology is accessible and is affordable.

There are some phones that are now with the voice recognition, you don't need to use -- those are more expensive. Now with standardization, we can make the accessibility features by default and make the prices go down.

You mentioned an important point, the participation and involvement of Persons with Disabilities around the world. When we talk about the harmonisation of the European Union and the technical and we think of the future international standards, so forth, as EDF we also -- it is an organization that we represent Persons with Disabilities in Europe, we're in contact with other organizations, other regional organizations in the country and in the Asia-Pacific, in the U.S. and we say that when we go to those international discussions on the future of international standards we really need to ensure that all stakeholders are well represented, including users. In users we face many difficulties in a standardization. We look -- because of lack of finance and support to be involved in the meetings around the world, because of lack of also knowledge and expertise, so being involved in these issues, it is complex, but we need to be there as well. As we have been discussing standards in support of legislation that are key for achieving our rights. We need also to be there and we need also to express our views and make sure that our motto, nothing about us without us is being respected in the standardization.

>> AUDIENCE: Please, can countries who are not --

>> INMACULADA: I want to add to what the previous speaker said.

The reference to the Convention, to the Article on the development cooperation, international cooperation, and to say that -- I refer to in my presentation to the importance of including accessibility in external action aid. Often in external action I think many of the efforts have been placed

into social inclusion, about social protection, support, aid, direct aid to peoples with disabilities. I think that the power of having accessibility standards linked to the provision of aid, of development aid and international cooperation aid, it is very, very important. I think there is an effort that needs to be done with the country dollars and decisions to be made in order to agree on the standards, in order to have a common understanding of what it is, the accessibility and how to place it, but on the other side making sure that we -- that we require accessibility with those funds and we raise those issues in dialogues that we have, for example Human Rights dialogues that we're having with different countries that the issue of technical assistance for the implementation of the standards, it is also included in development cooperation.

Finally, just to say, of course, we have to say -- we have based the discussion today, it was based on accessibility, but part of I would say essential of the mainstream accessible products, it is having an interface to be able to properly interoperate with assistive technology. We have not talked so much about assistive technology, at the end, that would be the last end of the personalization as Gregg was saying, but having that data, the interoperability, in that, it is very, very important.

>> DONAL RICE: Thank you.

We're nearly on time and I think we have one remote participant who would like to come in at this stage. That's a perfect timing.

>> I want to read a comment from IEEE Toronto sight. We have been pushing Ieee for adoption of open source licensing for five years and now they will implement it. We tried the same idea for Ontario and Canadian open source procurement. Nothing has happened. It is very difficult to change tender/procurement policy.

Thank you.

>> DONAL RICE: Thank you.

Are there any other comments from the floor at this time? Any final question or observation that anyone here would like to make?

We may be coming to a natural finishing point. I don't want to ignore the comment made by the remote participant. I think implementing this is to some degree not easy. My own experiences are that even just getting one line into a tender

that goes out from a public body requiring accessibility, it is a start. At least that begins to alert industry that government is considering this in how they procure and very often it is getting that one line in, it is the important thing and referring to the correct standards.

I would like if there is no other comments from the floor then just to -- it is -- there is one last comment.

Please, sir.

>> AUDIENCE: Thank you very much, moderator.

I would like to thank the speakers also for their speech. Yes, I would like to thank even the speech -- the touching speech given by my colleague on the frontline.

I have one comment regarding accessibility and the new era we're going to, smart, sustainable cities: We have to take that into consideration. That now most of the governments, they're working towards the smart, sustainable cities, so I think we have to bring this up in any discussion related to small cities to take that into consideration. I think this will be very important topic to be addressed and to be tackled when we develop standards for smart, sustainable cities.

Thank you.

>> DONAL RICE: Another comment from Susan Shore

>> Susan: Thank you. In response to the last comment, I had the pleasure to participate in a U.N. habitat meeting preparing for smart, sustainable cities and both Ima and Donal participated remotely in that conference. The issue of public procurement, using this tool of public procurement to ensure that we have accessible ICTs also in transportation was definitely raised and that issue, it should be moving forward to Ecuador.

Thank you.

>> DONAL RICE: If I could just maybe say some final words in summation that we have covered quite a lot of content here in the past two hours, but it does come down to, as you said, the C in ICT, it is about communication. It is about people being visible in our societies, being able to participate as equal brothers and sisters in society. What ICT, accessible procurement policy can do, it can look at true government spending, influence industry to produce technology that we can all use and it can raise awareness within government that ICT, accessible ICT is now a right under the U.N. Convention on the rights with Persons with Disabilities and it is fundamental to

how Persons with Disabilities participate in modern society. There is no one fits all solution. I teach students from developing countries. They have identified their own ways to get public procurement policy shaped so that it incorporates ICT accessibility and sometimes in very innovative ways. It requires a global conversation happening. That's why I'm so delighted that the ITU facilitated this discussion here today so we could hear what's happening, what's coming down the line, what the future developments will be, what resources are available. Just to emphasize again, the model ICT accessibility report, it is freely available from the ITU and as well another key resource to point to is the ITU academy online training for public procurement of accessible ICT products and services.

We'll continue the conversation, we continue the communication after this. I would like to finish by thanking my panelists. David, Masahito, Sh adi, Alejandro, Imnaculada, I had like to thank Gregg who participated remotely and also Mr. Huseinovic who opened this session on behalf of the ITU. This was jointly organized within the framework of the euro regional initiative on ICT accessibility.

Thank you to everyone for participating. Thank you for ITU for facilitating this.

As I said, we'll continue the conversation after this session over lunch and on to the future.

Thank you.

>> [Applause].