

March 5, 2015

United States Access Board Public Hearing on the ICT NPRM

>> TIMOTHY CREAGAN: Hello everyone, the CSUN staff just told us that because of fire safety codes, everyone in the room needs to be seated. So I ask everybody standing in the back of the room to please come to the front of the room. There is seating in the front. If you would please come forward and take the empty seats, you cannot stand in the back. We've been told that is a violation of fire code, so we ask that everyone that is standing to please come to the front and sit down.

We are going to start in about a minute. Thank you.

...

>> SACHIN PAVITHRAN: Good morning everyone.

We're going to get started right now. Would everyone please take your seats? I want to welcome everyone to the long awaited public hearing of the Information and Communication Technology rulemaking. This is the first public hearing.

Thank you.

I want to welcome everyone to the public hearing on the Information and Communication Technology (ICT) Notice of Proposed Rulemaking (NPRM). We're grateful for all of you who have come to this hearing today. This is a very exciting opportunity for us to hear from all of you. To start off, I want to introduce some of the members we have here. I am Sachin Pavithran. I am the vice chair of the U.S. Access Board. I have two members of our staff here, as well as a fellow Board member. I am going to introduce my first panel member here.

>> PATRICK CANNON: Good morning everyone. My name is Pat Cannon. Good morning everyone.

>> AUDIENCE: Good morning.

>> PATRICK CANNON: That is so much better. Thank you. It's my pleasure to be a public member of the U.S. Access Board. It is my pleasure to remember very well what happened and all the good things that took place as Section 508 was evolving many years ago. It is a pleasure to be part of the process as the standards are being upgraded. We look forward to hearing what you have to say today, and I thank you for being here.

>> TIMOTHY CREAGAN: Thank you. Good morning. I am Tim Creagan. I am a staff member here at the Access Board and I am very glad to see everyone here today.

Let me repeat what the CSUN folks told us from the Fire Marshal. There is no standing in the back, unfortunately. There are a few seats down front. If people can come up and find seats, please do so.

>>SACHIN PAVITHRAN: Thank you very much. I want to introduce one of our colleagues, Phil Jenkins.

>> PHILLIP JENKINS: Sure. Phil Jenkins here. I am a public board member along with Sachin and Patrick. Like them we were appointed to this position by a President for four years to serve on the board. We represent the public. My day job is with IBM. Because I work with IBM, there is a perceived, or there could be a perceived conflict of interest if I were to participate on this panel, so today I'm really more like the rest of you in the audience. I am participating today as a member of the public. I don't get to see the draft of the NPRM before you get to see it. I don't get to discuss the issues, like the Board and the staff and the other board members do. So I'm really glad that this came out, just like are you, and I'm happy to be able to participate here. I do encourage you to comment, to compliment the Board on the good things that are in the draft and to listen to the other comments here. I thank you; Sachin and Patrick, for letting me say "Hi."

>> SACHIN PAVITHRAN: I also want to acknowledge a few members of the audience. Where is Craig Luigart, who is the co-chair of the CIOC? Hello Craig. We have several members from the advisory committee who had been on the advisory committee in the past. We have Bruce Bailey, who is an Access Board staff member, who will be taking up sign-up sheets if anyone wants to sign up for testifying today. We have Helen and Alex from GSA who volunteered to help us with this hearing. I appreciate all of you coming today.

A couple of things before we get started, here are a couple of ground rules. Since we want to hear from everyone today as much as possible, we are going to limit the comments to about five minutes, so please try your best to stick to five minutes. If you have not signed up to speak today, please get in touch with Bruce to get your name on the list. If we have more time left after everyone who has signed up has testified, we will open up the microphone for more people to speak. So if you are considering whether or not to sign up, please do register so we can get a good count of how many people are planning on testifying.

We're keeping a transcript of all the comments that're being made, and these comments will be entered into our docket at [regulations.gov](https://www.regulations.gov). If you have any written materials, please do hand them over to Bruce or one of us, so we can also make sure that it is entered into the [regulations.gov](https://www.regulations.gov) website.

The hearing is supposed to go 11:30. We have to stop exactly at 11:30. There is another session going on right after this, so we will have to stop exactly at 11:30. So please respect everyone's comments and try to stay within the allotted minutes.

The whole idea of this hearing today is to hear from you, so we'll be just listening to your comments. There's not going to be a lot of engaging and dialogue with the public members

today. We just want to receive your comments so we can study them and use them when we prepare our draft final rule. All the comments that are being made today will be recorded and entered into the record, but don't expect a dialogue with the Board members over here. Please refrain from any, you know, heated discussions. We hope we can have a pretty good discussion about these proposed rules. I hope we can get some interesting comments today so we can get a good rule out there.

I'm going to start off with the first person on the list to testify today. His name is Wayne Dick. [To witness] If you want to come forward. The next person right after that is Dr. Mark Maurer. Dr. Wayne Dick.

>> WAYNE DICK: I'm here.

>> TIMOTHY CREAGAN: Go ahead, sir.

>> WAYNE DICK: Okay. Thank you. I would like to thank the chair and the Access Board and the staff for permitting me to testify on behalf of the California Council of Citizens with Low Vision. My name is Wayne Dick. I am a person with congenital low vision. As a member of the Council I am here to register my and our concerns to those rules of this ICT Refresh that are intended to address our needs.

From the perspective of the Council, they do not. Now, before I go on any further, I would like to say that I think the Refresh document is really an excellent document and, of course, I think that the Web Content Accessibility Guidelines have made a lot of moves forward. I just think in the area of low vision we have a problem. The problem is something that's very straightforward -The loss of paragraph 1194.22(d). That is the paragraph which gives users the right to remove the author's style sheet and still be able to read the page.

Now, with that paragraph, you can go into a browser like Mozilla, rock the style completely, enlarge the print as much as you want, not just 200%. I enlarge it about 500%. Everything word wraps and you can read just like you're reading a book with a few less words on the page.

Now, the Refresh has removed this capability, that is, the capability to get single column restructuring of the page for the ability to resize to any size you need. I have taken it up to 90 point and you can get a good representation that way, and do so with word wrapping, without having to do horizontal scrolling.

Now that capability was given to people with low vision in the preceding Section 508. It has now been removed and it has been replaced by a Web Content Accessibility Guideline Success Criterion, 1.4.4, that limits the size we can enlarge it to 200%. That's like if you start with 9 point, that is 18 point font and it permits the enlargement to be sloppy so that you have to do horizontal scrolling.

So we lost the ability to get enlargement with an indefinite size with word wrapping, and we were given a success criterion that does not protect word wrapping and only allows us what, for most people with low vision is a fairly insignificant enlargement.

So that's a very important thing, and what I would like to do is ask the Board to override its reference to the Web Content Accessibility Guidelines and insert the ability. We can state it in functional terms: insert the ability to restructure the page into a one column format, which can be enlarged, essentially without limit. We have found that 15 characters.... 12 characters to 15 characters on a width is about the reasonable limit we can do. There is a table in my submitted work of monitor size to number of characters per line and the associated font size that will fit in it. And it turns out you can get remarkably good enlargement with 15 characters per line and on an eight inch monitor on a tablet. You can get 36 to 50 point font that way. So, you know, we really are being limited, and what I'm asking for is the ability to put documents in a one column format that can be enlarged indefinitely.

Also, in 1.4.4 the issue of contrast is given as a hard number. Now, as it turns out, contrast is a variable thing, and there are actually many people with light sensitivity that don't do well with a high contrast at all. Most of us do, but a lot of people don't. So, if you set the contrast at 4.5 to 1, I've done it with members of my community, and they go "Ouch, could you change that?" So what we would really like is color control. That is the ability to choose your color. The author has the ability to choose from 16 million colors. Why don't we? It can be done.

The other thing is control over the font family. There are font families that bother some of us. And it is not the same for every person. Some people like serif fonts, some people like sanserif fonts. There are many characteristics of fonts. Am I over?

>> SACHIN PAVITHRAN: Yes. You have 20 seconds to wrap up.

>> WAYNE DICK: Okay. So that is really what the thrust of my paper is about, which is going into... and I'm very specific about where to do it...going into the Web Content Accessibility Guideline Success Criteria that do not give flexibility of presentation to people with low vision, and writing rules that override those specific success criteria so that the ability to change the visual presentation is granted to people with low vision. It is something that has been lost. We had it before in 508, so we've taken away that capability.

>> SACHIN PAVITHRAN: Thank you Dr. Wayne Dick.

>> WAYNE DICK: You're welcome.

>> SACHIN PAVITHRAN: The next person is Mark Maurer followed by Tom Babinski. Dr. Mark Maurer.

>> MARK MAURER: Thank you Mr. Chairman and members of the Board, and all the others who have come. My name is Mark Maurer. I am the past president of the National Federation of the Blind. I am testifying on behalf of the organization.

The National Federation of the Blind has been invested in the 508 Refresh since our participation on the Telecommunications Electronic and Information Technology Advisory Committee, and we've been closely watching the progress of this rulemaking and we are pleased that it has gotten to this point.

I urge that we get added, though, the Notice --the NPRM is a significant achievement and it will help the regulatory process, but these standards are used by other entities beyond federal agencies, and there are benchmarks which we urge that be adopted so that the entities that use them can get the chance to know what the standard in the United States is.

I have a number of comments about the good things that we observe in this, and I will go over them quickly. We support the decision to incorporate the WCAG by reference. It makes it easier for the Board to refresh the standards in the future without having to start from scratch.

We applaud the decision to transition from product based technical criteria to functionality based criteria, which also makes the proposed rule technology agnostic, flexible and multi-purpose.

We thank the Board for its appropriate response to the preliminary regulatory analysis findings. The analysis seemingly shows that the measurable costs of updating the standards to manufacturers and agencies are greater than the tangible financial benefits.

That updated standards will have benefits for people with disabilities, we do not accept these contingencies as accurate because we believe the analysis was a limited one, but the Board is moving ahead anyway with a robust set of technical and functional performance criteria. Accessibility is an investment worth making regardless of the cost because the blind and the otherwise disabled have a right to equal access in the workplace and equal participation in society and moreover, the analysis cannot take into account the sweeping change that will come from this rule making.

By improving the accessibility of information and communications technology in the federal sector, the Board is indirectly improving the accessibility of this across society, and it is this investment that brings the ultimate financial returns.

Now, we are also impressed with your comprehensive approach to interoperability. We think that the NPRM states that the Board considered requirements for all players, including accessible technology developers and that the AT industry should have some interoperability involved in the process as well.

There are some items that we think deserve additional examination. First we project problems for implementation of the social media standards. Social media is a popular tool for federal agencies to communicate with the public, but Facebook, Twitter and other popular sites are not WCAG compliant. In an ideal world agencies would not post anything on those sites because doing so would make them noncompliant and those companies would then feel pressure to embrace accessibility solutions. An acceptable, albeit unfortunate alternative would be for

agencies to refrain from posting anything on inaccessible sites indefinitely, assuming that Facebook and Twitter might never make the desired changes. Realistically the drive to use social media is too great. We worry that agencies will feel compelled to use social media despite the fact that it will put them in violation of these standards and then justify their violations because they say they can't control the companies.

We urged Facebook to work with us on accessibility and it turned us down, and society would deserve it if it happened. However, we urge the Board to be realistic and proactively address the problem by adding provisions about how to provide equivalent facilitation in the social media space.

We think that, perhaps, the UAAG standard, User Agent Accessibility Guidelines, would help here, and we urge that they be considered as part of the future work on the rulemaking.

Second, the standards for software and interoperability are expansive enough to cover mobile platforms, but we encourage the Board to examine mobile applications more closely. WCAG does not directly address mobile apps and a search of the NPRM for the words "mobile application" yields no results. While content delivered on a mobile platform or on a mobile app is technically still covered because it is web content, the accessibility solutions for mobile apps are unique and specific.

It is not enough for an agency to focus on ensuring that desktop and mobile software and content is accessible. There needs to be a benchmark for third party apps.

>> SACHIN PAVITHRAN: Thank you Dr. Mark Maurer. Up next is Tom Babinski and followed by --I guess Tom Babinski is not testifying.

>> AUDIENCE: I have a question.

>> SACHIN PAVITHRAN: Up next will be Ken Nakata. And following Mr. Ken will be James Jackson.

>> KEN NAKATA: Good morning.

>> PATRICK CANNON: Good morning.

>> KEN NAKATA: Okay. Let's see. My name is Ken Nakata and I'm the Director of the Accessibility Consulting Process at High Software which is now Cryptzone Incorporated. I have been working in the field of accessibility for over 20 years, starting first as one of the first trial attorneys in the Disability Rights Section at the U.S. Department of Justice back in 1992.

I was also a member of the ad hoc committee that developed the original Section 508 and I was part of the Section 508 interagency working group to help implement Section 508 in the federal government.

My work today includes accessibility in both the IP and built environments. For instance I work with NASA to ensure that its grantees conform to all aspects of Section 504 of the Rehabilitation Act, including architectural accessibility and conformance with UFAS.

>>SACHIN PAVITHRAN: Can you please get a little closer to the mic?

>> KEN NAKATA: Sorry. I work with public and private sector clients to make sure that software and web-based applications conform to Section 508 and to the Web Content Accessibility Guidelines, 2.0 A and double A.

First I would like to congratulate the Board for issuing its Section 508 and 255 NPRM. My testimony today, however, concerns the 508 NPRM and its blanket application of WCAG 2.0 A and level double A to the software and non-web documents. I believe this approach is a mistake. While I understand the pushback that the lengthy 2010 ANPRM created, simply incorporating WCAG 2.0 A and double A by reference for technologies that it was never intended to cover goes too far the other way. My testimony today also echoes my testimony three years ago at CSUN when I testified about this very same issue.

First, WCAG 2.0 was never intended to cover software or web pages as written. As many of the user interface or UI challenges are similar between web and non-web technologies, these challenges are not identical. WCAG's level A, double A and AAA priority levels reflects the specific challenges faced by people with disabilities in accessing the web--- and there is no reason to believe that these same issues are presented in the same priority with off line documents and desktop software. In fact, I think that there are far more pressing challenges in these other technologies that are either not present or have a much lower priority in WCAG 2.0. My written comments include many specific examples where WCAG 2.0 either overemphasizes some issues for non-web technology while minimizing other key issues. So relying on WCAG 2.0 alone glosses over these differences.

For guiding the reader, the NPRM directs the reader to simply read the W3C's WCAG2ICT Task Force working group note. This is a mistake for two reasons. First, the task force's note makes clear that it is not a standard like the EN 301-549 that followed it. Second, there are many places where its guidance is murky or unworkable—leading the authors of EN 301-549 to drop the success criteria from its standards for the non-web world.

Second, I believe that incorporating WCAG 2.0 A and AA by reference for software and non-web documents would be disastrous for the IT industry, government, and people with disabilities. The IT industry affected by this rule includes not just software developers but anyone creating a simple PowerPoint file for a government training course. We can't assume that this audience would read WCAG 2.0, then read the WCAG2ICT Task Force note, and ultimately interpret WCAG's success criteria in an objective and consistent manner. These audiences need rules that are tailored specifically to their technologies—again, the approach that Europe took when it created EN 301-549.

While many complain that Section 508 implementation by the Federal government could be better, a shorter rule would be a far less effective rule. Currently, the Federal government uses the Voluntary Product Accessibility Template (VPAT) for roughly assessing Section 508 conformance. If document and software accessibility are reduced to a single line item in a VPAT—as the current NPRM structure would make likely—Section 508 implementation, I believe, would plummet across the Federal government. Section 508 is already criticized as a “check the box” kind of requirement that vendors can easily evade. The NPRM’s approach encourages this bad behavior for lazy vendors or inattentive procurement officers. Second, reducing software and document accessibility to a single requirement would make it virtually impossible for agencies to compare accessibility features and fulfill their obligation....

>> SACHIN PAVITHRAN: Mr. Nakata, could you wrap up in 30 seconds?

>> KEN NAKATA: Sure. ...Obligation of procuring the product that “best meets” the Section 508 standards. Sadly the ultimate loser in all of these scenarios would be people with disabilities, as fewer accessible products would make it into the Federal government and ultimately mainstream technology.

For all those reasons I think blanket application of WCAG 2.0 in 508 would just be disastrous. So, thank you for your attention.

>> SACHIN PAVITHRAN: Thank you for your comments.

Up next is Mr. James Jackson. And following Mr. James Jackson will be Mr. Karl Groves.

>> JAMES JACKSON: Hi. My name is James Jackson. And I'm a person with a learning disability. In December 2007 I graduated from college --the same month as the recession which would ultimately lead to the financial crises of 2008.

This is a very challenging time for a recent graduate to find work. Getting a job means applying for as many positions as possible and usually through online application systems. As someone with a learning disability, this could be extremely difficult, especially because even a single error in an online application would exclude you from a position. To ensure that I filled out the most applications as possible as accurately as possible, I did what worked for me in the past and what every learning disability specialist I spoke to about this type of situation has advised me to do. I took frequent breaks. On these breaks I would take a walk and think about my strategy for applying for jobs but they almost always meant stepping away from the computer. Often when I got back I could pick up where I left off, but more often than not I would be logged out of the system. Meaning I would have to start the application over again, which would usually necessitate another break.

Needless to say, this drastically impacted the number of applications I could complete and my chances of getting a job. I am very grateful for the Access Board's work on updating Section 508 and Section 255. I am especially grateful for the pause stop high criteria in WCAG 2.0

which I think will greatly benefit individuals like me with learning and attention related disabilities.

While the new rules seem to address the disability problems I described, this criteria has a critical assumption that means it won't provide the needed support for people like me.

Specifically sites are allowed to time out if they warn users 20 seconds in advance and then allow the user to extend the time. This means that if I were applying for a federal job or a federal grant or using any similar federal system, the revised Section 508 guidelines would not protect my ability to take a break, because I would not be able to leave my computer for more than 20 seconds without fear of being logged out. I recognize that there is a strong need for guidance like the WC3 for individuals with learning and attention disabilities but I also believe that when the need and impact are clear, and they are aligned with guidance given to people like me, it is the Access Board's responsibility to act now.

I would like to ask you when you incorporate the WCAG 2.0 Success Criterion "2.2.1 Timing Adjustable" please do not include the extended extension. I've also noted that in the Notice of Proposed Rulemaking that individuals with learning and attention related disabilities are not mentioned explicitly. While the term "cognitive disabilities" is used, this term does not include learning and attention related disabilities. So because of this I would like to ask the Access Board to include reference to individuals with learning and attention disabilities in future procedural documents and consideration, if only to acknowledge and document the lack of research and guidance from law makers and international bodies.

While our disabilities are invisible, I assure you that we are present. According to the National Center for Learning Disabilities individuals with learning and attention related disabilities make up 15 to 20% of the U.S. population, making us one of, if not the largest group, of Americans with disabilities. At the same time, a study from the Journal of Texas Medicine has demonstrated that we make up 49% of the prison population. The American Psychological Association notes that we have greater stress and lower incomes. I believe strongly that these negative trends are a result of unequal access, in employment but also information technology.

Again, I want to thank the Access Board for the work that it's done and I think that there are many inclusions in the new guidelines that are going to be beneficial to people with learning and attention related disabilities, but I would also like to ask you to, again, not include the warning extension language from the "2.2.1 Timing Adjustable" criterion of WCAG 2.0. Also I would like you to include individuals with learning disabilities in your documentation in consideration of the future. Again, if only to mention that there is a lack of research and guidance.

>> SACHIN PAVITHRAN: Thank you, Mr. Jackson.

Up next is Mr. Karl Groves and following him will be Mr. Richard Schwerdtfeger.

>> KARL GROVES: Hi. My name is Karl Groves. I've been involved in Web Development, Usability, and Accessibility since the late 1990s. Living in the Washington DC area, and working in accessibility my professional career in this field has always involved Section 508.

In 2006 I was excited to hear about the Refresh process. As a web developer, the advent of technologies like Asynchronous JavaScript blurred the lines between software and web and the rapid changes in mobile computing meant that the technologies that drove the old standards were quickly made obsolete. The Refresh was exciting to me because the standards could be made more relevant.

The TEITAC committee's membership included representatives from industry, disability groups, standard-setting bodies in the U.S. and abroad, and government agencies, among others. Members were selected from applications received in response to a Board notice published in April of 2006. In the spirit of international cooperation, the Access Board also included representatives from the European Commission, Japan, Canada, and Australia.

In 2008 I was also excited to hear that the TEITAC committee had delivered their report. 2008. (Pause) 2008.

The same year this nation saw its first Black President. Since that time, we've seen the overthrow and creation of governments in the Middle East. The US Economy dove into and crawled out of a massive economic crisis. Congress approved and implemented the Affordable Care Act – including all of the years of partisan fighting and surviving a challenge at the US Supreme Court and to date 7.3 million people had enrolled through the marketplace and paid their premiums. Osama Bin Laden was successfully brought to justice for 9-11. Barack Obama was re-elected for his 2nd term. And the Section 508 Refresh has still not made it to Final Rule.

Why is it that we can see the creation and implementation of the most sweeping change to our nation's healthcare system in roughly 20% of the time it has taken to get to this hearing?

NOT having a new Final Rule has resulted in chaos within the compliance space at the Federal, State, and Local levels as well as higher education institutions. While only the Federal Executive Branch is required to adhere to Section 508, these others have often adopted Section 508 and use it to guide their own ICT procurements. It has resulted in chaos for contractors who are told by their public sector clients that they have to conform to grossly out of date standards while their private sector clients want conformance to WCAG.

I'm pleased to provide my voice to this process and want to encourage you to the best of my abilities to make haste. There will be plenty of people today who will say that the new standards aren't enough. Incorporating WCAG by reference means, to many, that it doesn't go far enough for persons with low vision or cognitive disorders. As the father of a child with severe learning disabilities, this resonates with me. But we must remain aware that the "perfect" is the enemy of the good. We must commit ourselves to the pragmatic understanding that what the Refresh proposes now is far, far better than what currently exists in Subpart B and Subpart

C of the Section 508 we now have. The lack of a final rule is, in my opinion, a failure on the Access Board's part to achieve its mission to protect citizens with disabilities.

You must not delay this process any longer. You must make haste. Finish what so many people have worked so hard on. Make haste toward an actual Final Rule.

Thank you.

>> SACHIN PAVITHRAN: Thank you, Mr. Groves.

(Applause)

>> SACHIN PAVITHRAN: I understand Richard Schwerdtfeger is not here right now, so we're going to move on to Axel Leblois. After Axel will be Ann Marie Rohaly.

>> AXEL LEBLOIS: Good morning. Thank you Mr. Chairman. My name is Axel Leblois and I am the president of the G3 ICT, the global initiative for ICTs. And several of our agent partners were part of the U.S. Access Board so I won't spend too much time introducing ourselves. We were formed back in 2006 to promote the disposition of the Convention on the Rights of People with Disabilities on ICT Accessibility and we have been working at the regional center with government, people with disabilities and the private sector to ensure that the situation will be understood and implemented around the world.

Now, this may seem to be like a very distant topic given the nature of the discussion today, however, I want to dive into the issues of public procurement and ICT accessibility on a global basis.

So first I go to 15 countries that have ratified the CRPD. The CRPD has very clear dispositions in Article Nine and other articles to ensure that ICT's must be made accessible to all citizens with all types of disabilities. As part of the policy making that is following up on the work done by countries of the CRPD, ICT procurement is now formally recognized as one of the key steps. It is part of the guidelines that are signed by the United Nations to countries to report on their progress towards world CRPD implementation, which mean that all countries will have the opportunity for public procurement policies for accessibility.

Second, our organization has actually designed and published a modern policy which has now become the official grouping for public procurement which refers to both the Section 508 and PN in its text.

And I mention that because history in the U.S. has played a critical role in apportioning public procurement from a government basis by inviting observers from different continents in its proceedings early on. That had a big impact for the country to start procurement in a smart way and that is why you see the EN start up today. In Japan, Australia...we just came back from South Africa where we introduced heavy procurement in the legislation. So I think it is really important as the U.S. Access Board contemplates the next refresh that the global dimension of

what you do here be considered very carefully, because it is our sense that long-term countries will progressively lineup with one single start up, probably if there is a standard that will eventually be a very key development.

In a very practical fashion, anything that can be done on one hand to keep technical leadership that the U.S. Access Board had for all those years, to ensure access to disability, but at the same time to ensure that there is harmonization with, especially, the EN startup which is now completed, is extremely important.

For a person with disabilities, cost is an issue for everything, and the more fragmentation in the marketplace, the less you have for the cost of the solutions, so that is why I think keeping in mind global dimension of standard authorization. Whatever you --we end up publishing as a rule is extremely important. So our call is for the U.S. Access Board to do whatever is possible to go to world harmonization, if it is not compromising the policy of the view you are publishing.

Thank you.

>> SACHIN PAVITHRAN: Thank you.

Up next is Dr. Ann Marie Rohaly and following will be Mike Paciello.

>> ANN MARIE ROHALY: Good morning. My name is Ann Marie Rohaly and I'm Director of Accessibility Policies at Microsoft. Microsoft is committed to accessibility in the business environment and as an area ripe for innovation leading to the promise of future technologies. Microsoft supports robust globally harmonized procurement regulations and appreciates the work the Access Board has done over the past few years considering all of the comments on the 2011 ANPRM and for issuing the recent Notice of Proposed Rulemaking.

While we are still digging into the details of the NPRM, we have already identified some areas of concern. Specifically, we are concerned by the requirement for real time text and inadequate harmonization with the European EN 301 549 standard that is most evident in the Access Board's proposed broad application of WCAG 2.0. Microsoft urges the board to consider the positive impact of on all stakeholders. Reducing fragmentation through complete alignment with the EN will result in decreased costs and increased efficiency, by allowing companies to build once and sell everywhere and will also provide consumers with a more consistent user experience.

Microsoft will be preparing detailed comments on these and other issues for submission to the Access Board by the May 28th filing deadline.

Thank you.

>> SACHIN PAVITHRAN: Thank you, Ms. Rohaly. Up next is Mike Paciello. Sorry.

>> MIKE PACIELLO: Good morning. My name is Mike Paciello, founder of The Paciello group, also co-chair along with my colleague, Jim Tobias, of the Access Board advisory committee. So it's a good day for us.

I think if Jim were here, I didn't see him here so I'm not sure he is here, that we've finally made it, so to speak. We have gotten to a point where we think we might see the end of the tunnel here, the light at the end of the tunnel.

I would like to just make a couple of comments. Really they're more in terms of capturing some of the main points that have already been expressed this morning, I'm sure we'll hear some other very important comments.

So one I want to thank the Access Board. I want to thank the folks, including Tim Creagan, David Capozzi, Bruce Bailey and the staff that have worked very hard over the past few years. I am also very much aware of the internal committees that have been working, the government organizations, the hard work that they put in to getting to some wording here. I think all of them should be commended and thank them for all of their hard work. I also think it is important to recognize the 41 individual organizations that participated in the Advisory, the TEITAC Advisory Committee, for the hard work that they put in to get to us a point where we have a standard, at least a federal standard that we can look at, one, that as a focus on harmonization of standards, and a stronger focus on user abilities, in the area of technology and disability. So I look forward to seeing many of these aspects as part of the Refresh, hopefully improving the lives of individuals with disabilities long-term.

So I want to make a couple of other brief comments. One, to emphasize something that Ken Nakata said, that is this process, and frankly, Karl Groves also mentioned, this process, this update Refresh process is woefully inept, and it needs to be improved. And it would not take a whole lot to improve the process, whether we do it by reference to ISO or other standards, but this process needs to be improved. To wait seven, eight years for a standard -- as far as technology is concerned it is already too late. So many other things have been developed, so many other concerns involving the lives of various individuals with disabilities, including what you heard again this morning in the areas of low vision, cognition, I'm thinking of individuals with various voice interfaces that we're going to have to start looking for... mobility interfaces ...these are being designed around sensory protocols and whatnot. We can't wait seven or eight years. It is just not right. So I look to the Access Board to really give that some thought over the next several months.

In line with that, take in the comments today, listen to the comments, give them thought, give them consideration but do not allow them to hold up this process. We need this mandate to be out, to be official, and to become law so that we can move on to other areas that need to be improved.

Finally I would also like to highlight something that Axel just mentioned. I know that the Access Board is very much aware of the implications, the international implications of the standards that we are producing here through the Section 508 and Section 255 Refresh. We

need to understand that we are looked up to as a nation in setting the lead and setting the example for everyone else. We need to take into consideration the international implications, much like we did by bringing in international colleagues into the TEITAC Advisory Committee but we also need to understand the rolling effects of what that means in the long-term.

Thank you again for the opportunity to be here this morning and I will look forward to hearing official comments.

>>SACHIN PAVITHRAN: Thank you Mr. Paciello. Mr. Richard Schwerdtfeger.

>> TIMOTHY CREAGAN: Rich.

>> RICHARD SCHWERDTFEGER: My name is Rich Schwerdtfeger and I am the IBM Software Accessibility Chief Technology Officer. In this role, I am responsible for providing technical accessibility direction to all IBM software products. I personally helped develop the original Graphical User Interface Screen Reader for the OS/2 operating system on the IBM Personal Computer back in the 1990's.

First, I want to praise the Access Board for addressing our concerns with the 2011 ANPRM Functional Performance Criteria requirements, which were to be applied to all ICT with no exceptions. The new 2015 NPRM clearly indicates that the Functional Performance Criteria are only required in cases of equivalent facilitation or for functionality of ICT that the requirements in Section 508 do not cover.

But there are some areas in the NPRM that are of great concern. The first is the misinterpretation of WCAG 2.0 for software interoperability. The software interoperability requirements 502.3.1 Object Information, 502.3.3 Values, and 502.3.6 Text all have new text that requires them to also be capable of being programmatically set by assistive technology. The corresponding WCAG 4.1.2 requirement states that the ability to programmatically set the states, values and text is intended for the content author, not for assistive technologies (or AT) directly and would only occur due to a user action on an element in the user interface. The part of the WCAG 4.1.2 criteria for assistive technologies is for the AT to be notified of any changes to those items, not for AT to be able to programmatically set them directly. Both web applications and software applications modify states and the change in state is conveyed to the assistive technology via a notification mechanism. Authors and software developers create code that responds to user actions or programmatic "accessible actions" which will cause the author's code to change the state or value and perform the notification action. Authors do not expect to respond to a third party assistive technology directly changing the value of an accessibility state, like checking a checkbox, and then having to respond to it independently. The browser vendors saw earlier versions of the WAI-ARIA specification that proposed a similar change and vehemently rejected assistive technologies being allowed to change states in the browser for these reasons. Additionally, these features are not built into current platforms, accessibility APIs, browsers, or applications and such a change would be a huge effort at an enormous cost. It would also be met with great opposition. Furthermore, we believe that was not the intent of the Access Board's wording of this 502.3.1 requirement.

The second issue we would like to highlight is that harmonization with worldwide standards is of utmost importance for fair trade internationally. The European standard, EN 301 549, also known as EU Mandate 376, was completed in October 2013 and the final standard was published in February 2014. In our initial comparisons between the 2015 508 NPRM draft with the European standard, it is clear that the NPRM has departed from full harmonization in some critical areas. First, the draft does not explicitly exclude certain WCAG 2.0 criteria for non-web software and documentation where they should not apply where the European standard clearly excludes them from the requirements. Instead, the 508 NPRM references the WCAG note “Applying WCAG 2.0 to Non-Web Information and Communications Technologies”, or WCAG2ICT, which leaves the criteria with questionable application to non-Web technologies and content to the interpretation of the reader.

We also found a number of other harmonization issues and will be submitting detailed comments and recommendations to address those issues for your consideration. The bottom line is that industry needs to be able to deliver better solutions that will work here in the U.S., in Europe, and in other countries, as we cannot sustain the development, test and maintenance of multiple versions of the same product to conform to differing standards in different countries. Harmonization is essential to ensuring there can be products that meet the needs of people with disabilities no matter where they live or work.

This brings me to the most serious issue, one that is keeping Section 508 guidance from being up to date with the rapid changes in technologies as well as the rapid advancement in understanding the user needs of persons with disabilities. The Section 508 guidance must be refreshed more often and in a timely manner. For example, it is clear that you will be receiving many comments that the 2015 Section 508 NPRM requirements don't go far enough in addressing the needs of people with learning and cognitive disabilities. Due to the personalization of the web and intense focus now in web standards on these disability issues, we expect to see recommendations coming out within the next 3-5 years that help support this very large and diverse user group. This means we must refresh the 508 requirements more frequently – at a 3-5 year rate to prevent the requirements from becoming outdated like the current 508 guidance. This would help alleviate many of the concerns of the technology industry as well as those who are underserved by today's guidance. We would like to work with you to see how we can make that possible.

We at IBM encourage the Access Board to make it a priority to address these issues and any others brought up during this public review as quickly as possible to reach the final rule. The current 508 requirements are quite out of date and the European standard has already been completed. Our mutual desire for improved access for persons with disabilities in the U.S., Europe, and around the world is at an ever-increasing risk with further delays in completing the refresh of the Section 508 requirements.

Thank you very much.

>> SACHIN PAVITHRAN: Thank you.

I am going to have Tim take up the next names. We have two more people that signed up and after that we will open up for more comments. If you want to testify, please do get in touch with Bruce so he can get your name on the list.

>> TIMOTHY CREAGAN: Thank you, Mr. Chairman. We call Synge Tyson. Thank you.

>> SYNGE TYSON: Good morning. My name is Synge Tyson. I have a diverse background in the legal field and rehabilitation for people with disabilities.

I would like to thank the Access Board and the community for their comments and engagement this morning. These rules are definitely moving progress and accessible technology forward. Two concerns have been reported implementation and discrimination. The lack of proper implementation leads to discrimination. There are no or very few professionals in the federal government who have the human center computing expertise to work unsupervised or create policy in good best practices across all federal agencies.

From not having a dedicated 508 coordinator, to placing the issues of technical concern related to implementation in the limited to the --in the limited knowledge of supervisors and reasonable accommodation coordinators who have limited or no knowledge of people with disabilities. They have no knowledge of the needs of persons with multiple accommodation needs or knowledge of the requested accommodation to be implemented.

Until the workplace shall comply with our accommodations and there is skilled help, and there are stiff penalties for agencies who do not comply, the noncompliance is the second issue leading to discrimination. Once a federal employee has not been accommodated with accessible content and denied reasonable accommodations, understanding that, first is a violation in itself of not being accommodated and the second is a continuing violation of the Rehab Act of 1973, Section 503 --excuse me, 501, or not providing accommodation for the first breach of not being compliant with the 508 regulations.

For example a person with low vision is not able to effectively work with a specific computer program because it is inaccessible, and then denied or not provided training on an accommodation. Once a person with a disability is told that they have --excuse me. Once denied, a person with a disability is usually told they have the option to file an EEO complaint. That process is broken. I will not go into detail in this forum about why the process is broken or how. However, the end result is the employee has to, quote, hang in there through the EEO process, find another job, retaliate against and because of the filing EEO complaints lose their job or stay in the position and never be accommodated and not able to effectively and efficiently work, which has other implications.

I ask that as the Board moves forward with decisions and implementation you address how you are going to make agencies do what they should already be doing but not. When they do not comply, what are the steps and how will it be addressed that they are accountable for noncompliance.

So these comments are speaking as former federal employee. These are issues that definitely need to be addressed when we implement the new 508 standards and are moving forward with the overall technology and compliance within federal agencies.

Thank you.

(Applause)

>> TIMOTHY CREAGAN: Our next person who has signed up to testify is Mr. Vincent Martin. Vincent Martin.

>> VINCENT MARTIN: Thank you. My name is Vincent Martin and I've had a long distinguished career working with people with disabilities in all forms of technology.

Over the last 25 years I have achieved so far four varied degrees related to engineering, psychology, computer interaction and hopefully in two years I will complete my Ph.D. in human center computing.

What I would like to do is thank the Access Board for what it has done, before but I would also like to echo what Mr. Paciello said earlier. We need to get on with it so we can get on with it.

(Laughter)

>> VINCENT MARTIN: Most of this stuff can be done quicker and the technology changes so rapidly it is amazing how quick it changes.

Tomorrow afternoon I will have a 19 year old kid here presenting at CSUN who was a kid in our lab two years ago, who has now invented a screen reader that works better than most that work on the market right now and it will be free. He did it because he worked in a lab. If it wasn't for guidelines that existed before he wouldn't have this, but if we have guidelines that exist now instead of waiting on them to come out, we could have more things done. I am around kids every day. I am 50. We made the first totally accessible fantasy football league last year and they had a great idea they could play with the old guy in the lab.

With some guidelines and a little guidance if we get them out we can get on with it.

Thank you.

(Applause)

>> TIMOTHY CREAGAN: Mr. Bill Grubaugh.

>> BILL GRUBAUGH: Thank you for this opportunity. My name is Bill Grubaugh and I'm speaking independently. My background is Human Factors and ergonomics and human loop

systems analysis and I work currently with ICT product analysis in government educational sector environments.

>> TIMOTHY CREAGAN: Excuse me. Could you speak a little closer to the microphone?

>> BILL GRUBAUGH: Let me see where I left off by reading this thing. Okay. To begin with, I have a question, followed by a suggestion and I would like to end with a comment. I always appear naïve, however I appreciate the opportunity to express my thoughts. Thank you again. From reading the 2015 ICT standards and guidelines and the joining of the Access Board and the FCC 225, it appears that the Access Board would be taking an advisory role and that the FCC would become the governmental interface between customers of ICT products and the customer premises equipment manufacturers.

I mentioned this because within the legal authority portion, we read that the Access Board publishes, reviews, amends standards. The Access Board is required to develop 508 assuming it went to 255 guidelines for accessibility, in conjunction with the FCC. The FCC is responsible for enforcing 255 and implementing regulations. Further, the FCC is not bound to adopt the Access Board's guidelines as its own or use them as minimum requirements.

My question at this point is, will the FCC become the agency that shapes the future of accessible technology and/or as I prefer to say consumer ICT products in the United States?

>> TIMOTHY CREAGAN: Thank you, Mr. Grubaugh for your question.

What he is referring to is the distinction between two laws. As we discussed in the NPRM, this is found in the Executive Summary at pages 8 to 13 which is available on the Access Board website and also at www.regulations.gov. What the Access Board is doing in this rulemaking is we are updating and modernizing the regulatory requirements for two different laws. One law is Section 508 of the Rehabilitation Act. The standards to implement the Section 508 law are developed and promulgated by the Access Board. Then each agency in the federal government is responsible for implementing Section 508 as applied to itself.

With regard to Section 255, the Access Board has the authority to develop what are called guidelines for the Section 255 rule. The Section 255 Guidelines are then reviewed by the Federal Communications Commission. It is totally within the jurisdiction of the Federal Communications Commission to adopt or not, such of the proposed Section 255 revised guidelines as they wish to adopt. The FCC does not have jurisdiction over Section 508.

This rulemaking is addressing two rules. We are revising the technical standards for two rules at the same time. Technology may have common technical requirements but be governed by different laws, depending on who is purchasing the technology. When the technology is purchased by the federal government, that is addressed by the 508 standards. When the same technology is sold to the private sector, that is addressed under the 255 Guidelines. The technical requirements would be the same in either case. Each rule then has separate sections

covering how it is applied, with definitions and standards of review. This is explained in further detail in the NPRM. Thank you.

>> BILL GRUBAUGH: Thank you. That helps a lot.

My second section is a suggestion. I would like to suggest that we explore or recognize the cost expense value and work model in conjunction with the cost benefit model that is being used in the regulatory analysis stage.

I mention this because the cost expense value work may provide greater nuance in applicability when we are at that stage. What I hope this means is that a product's cost may have seemed like a good value even if it is an expensive product in the implementation. However the guidelines that are set, the functionality bar out of one of ten could render a consumer product 90% worthless to a customer with a disability.

This may be exemplified by software and IBM accessibility centers, integrating accessibility in rapid development. IBM noted three points: catching a software bug at the product development stage cost \$5; at the testing stage, \$500, and at the consumer end \$15,000. That presents nearly a 3,000 times cost expense difference. In the end they trust that the FCC, as in my previous assumption, will encourage product innovation through the development of equivalent facilitation.

If the Access Board standards and guidelines are not adopted, then we want to encourage industry not to get stuck on standards as an excuse for non-accessible products, but instead use the worth of their resources to build better products that are equally accessible and fully functional for all customers as customers, not necessarily customers with disabilities.

And thank you again.

>> TIMOTHY CREAGAN: Thank you.

For the next witness we call Mr. Greg Vanderheiden.

>> GREG VANDERHEIDEN: Hello. My name is Greg Vanderheiden. I am a professor at the University of Wisconsin, director of the TRACE Center and have worked on the development of many of these guidelines over the years and others that are based on the research from our Center.

First I want to congratulate you on the progress that you have made on this. This is really a very, very difficult thing and there is so much right and it really is needed. This Refresh has relatively little that needs tuning up. Some of these tune ups are very important, but they're really small compared to everything else, and I echo the comments of the previous speakers who urge moving forward and getting this done rather than beating it to death to try to tweak some areas.

I do think there are some additional explanations needed in places. Since I know that often the critiques are the result of misunderstanding what it is that the provisions actually say, or not understanding that the rules must apply to all types of things. So they'll pick out one particular kind and say well we can make a guideline like this, but it won't work in other places where these would apply. So, we need some more descriptions in place.

I agree with the previous speaker that there are also benefits and cost savings that have not been captured and I will try to send in some comments there about that.

Overall it's a very good Refresh. Moving from “products” to “functionality” is absolutely essential in this day, when moving into software and single devices that have many different functions.

The use of WCAG for all three I think is really insightful especially given the convergence. Comments have been made about having WCAG cited as whole rather than broken out in different sections as in EN 301 549. But this is not really a problem since WCAG is a single standard and 508 is a single standard, and in both cases to meet 508, you have to meet all the provisions. You can't meet it by meeting 80% of the provisions.

If you want to say, “Well, we didn't meet them all, but we met this many,” you could also report on WCAG. You could break it out in the same sheet that you're reporting the VPAT on or whatever. You can break out the provisions wherever you see it and it would work, then you could say “Well I didn't do these parts of 508, and I didn't do these parts of WCAG.” Having you break them out and stick them in isn't necessary. And as you pointed out, it would lose all the linkage to the supporting material in WCAG. So that problem is solvable and it will be solvable first time anybody chooses the reporting format.

I also commend you for keeping WCAG intact rather than creating different versions as was done in EN 301 549. Breaking it up and making it different for those domains only confounds things, as these domains are converging. We see a single entity like an eBook which is a document, but it also has web components. It has software, it has media, and they're all together and you're actually saying that this part of this page of this document would follow one set of standards and this other one would have a different set of standards. Users today can't even figure out today when they're on the web and when they're on their computer and what these are. So it is really critical keeping these provisions together.

A lot has been said about harmonization, and harmonization is critical. It does not mean that things have to be identical. When you have people singing in harmony, they are not all singing the same part. Okay. Harmonization means that things do not conflict. There is no dissonance. The current 508 is completely harmonized with EN 301 549. The only exception might go in re trainings. You will have to check that part out. There are no conflicts otherwise. 508 does in fact repair several deficiencies in EN 301 549, but it does it in a way that does not conflict with EN 301 549. You can conform to both of them at the same time.

I also want to echo the comment that the Access Board should not relinquish its leadership in accessibility and the tremendous efforts it has done in bringing 508 to the conclusion and getting the provisions right. Ensure that the final rule continues to be harmonized, but do not remove improvements or fixes that you have made in this Refresh.

On “cognitive”, there is much misunderstanding about the term and I would like to suggest that you consider the phrase “cognitive language and learning disabilities” in all of the places where you have “cognitive” because of the difference in interpretation. In fact in different countries what we call learning disabilities are called “cognitive” and vice versa, so that you need to distinguish the terms. Actually if you treat them as a unit you can get around this.

In the interest of time I will send other comments separately. We do refer people to “tiny.url.com/508/webinar” for a series of eight webinars on the Refresh that we are going to be doing on a TRACE webinar series. They will be held to help consumers understand what all this technical language means for the different disability groups, including visual, hearing, physical and cognitive. So the url again is tiny. –“tiny.url.com/508/webinar.” There is going to be a presentation and then a separate session for discussion so that everybody can talk about these as well.

Thank you very much.

>> TIMOTHY CREAGAN: Thank you. Our last witness who signed up for today so far is Judy Brewer.

>> JUDY BREWER: Thank you for the opportunity to comment on this NPRM on the 508 and 255 Refresh and for the work that the Access Board has done to prepare this NPRM. My comments today on behalf of the Web Accessibility Initiative of the Worldwide Web Consortium are preliminary and may be followed by more detail or otherwise amended written comments.

People of all abilities have an interest and a need to use Information and Communication Technologies. While there have been improvements over the years and attention to the accessibility of Information and Communication Technologies, it is still the case that accessibility may be overlooked at key stages of design and development. This still today results in many barriers to Information and Communication Technologies, including the web usage by people with disabilities, even though there is extensive publicly available information on how to make ICT accessible for people with disabilities, including the standard for web content accessibility from the W3C-WAI. We therefore appreciate the Access Board's efforts to include WCAG 2.0 by incorporation by reference.

Among the strongest feedback that we hear is that international harmonization of standards is one of the best drivers of progress in accessibility. It enables sharing the advantages of authoring and evaluation tools and implementation support materials that support a common standard and removes the need for organizations to meet conflicting requirements in different settings.

This NPRM importantly notes that evolution of technology since the last Section 508 Refresh. This evolution of technology continues today. Industry has moved substantially to an analytical development process. The regulatory process is on a stable standard to reference. At W3C-WAI we endeavor to involve the technical solutions and the guidance for supporting the accessibility requirements of people with disabilities in a multi-stakeholder consensus based setting. This includes in the area for instance, of cognitive and learning disabilities, where WCAG 2.0 provides some coverage, but we would like to be able to provide more. For instance in this area we currently have a task force which we are hoping may in the future result in provisions that could result in deeper coverage in this area.

Likewise, we are heavily involved in mobile accessibility for which there is already extensive coverage for WCAG 2.0 and User Agent Accessibility Guidelines 2.0. There could potentially be additional information available in the future.

Looking to the future therefore we hope that the Access Board continues to seek ways that it may not only accomplish a Refresh, but be able to take a refreshing approach on an ongoing basis, and on a more frequent basis. Perhaps this could be done through earlier and more explicit use of equivalent facilitation and/or other mechanisms. We encourage the Access Board to seek more ways to do this.

I would like to again thank you, the Access Board, for preparing this NPRM, and also for your attention to international harmonization via incorporation of WCAG2.0. I expect that we will be providing more detailed comments before the ends of the comment period.

Thank you.

>> SACHIN PAVITHRAN: Thank you, Ms. Brewer.

Thank you for all the comments, all the suggestions and also the criticism. We do need to hear all of those. We are urging as much as possible to get this ICT rule to a final rule as fast as we can, but I do --I'm not trying to make excuses for the Access Board, but I do want to make you aware that this is not just U.S. Access Board working on this rule. We have multiple federal agencies working on this rule as well. So we are pushing as much as possible to make --to get this done as quickly as we can do.

Are there any more people who are waiting to make comments or testify? Remember, any comments that are made in the hallways are not going to be recorded, so you need to make comments by testifying here, or go on to the Regulation.gov website and file your comments. There are 90 days to do that. We do have one more hearing coming up next Wednesday at the Access Board site.

>> TIMOTHY CREAGAN: Katie Haritos-Shea wishes to testify. Thank you, Katie.

>> KATIE HARITOS-SHEA: Thank you very much. I want to say a couple of things. I think the Access Board has done an awesome job and I understand the concerns of many that certain

things are not included. I have a suggestion, specific suggestion for including cognitive without going off the rails and slowing things down. That is by adding back in actual functional performance criteria for persons with cognitive language and persons with disabilities that had been put in by the TEITAC in the recommendations and was for some reason removed. So we would like to see that be put back in as a 3 or 0.9. I can't recall.

So therefore if you are pointing to WCAG and its supplemental materials, as Judy pointed out the supplemental materials are updated every six months. So we're continually adding the new technologies without having again a new standard yet, right. We continually update these supporting documents as, you know. ARIA becomes more accepted as HTML 5 has now become a specification. So there is also an expectation that there will be cognitive techniques added to the techniques that exist today.

Also someone talked about the mobile space. The WCAG working group also has a mobile task force. They have just released a document about how WCAG applies to mobile, in the mobile space, but also they're coming up with techniques for mobile. So I think that keeps you out of the space of having to do those things and rely on what the W3C-WAI is doing by sticking with a solid normative standard, but its supplemental materials are updated generally every six months or so. Those new supplemental materials include the latest techniques.

So I think that's a thing that I just wanted to bring up, that there is an easier way to get cognitive in here without having to spend a lot of time on it. Rely on what the W3C is doing because they take specialists from all around the world and it is a consensus based organization, but then you don't have to deal with all that. They can deal with all that heartache.

Thank you.

>> TIMOTHY CREAGAN: Thank you.

>> SACHIN PAVITHRAN: All right. Any more comments? Thank you for your comments Katie.

Any more comments? Anyone who would like to testify? Like I said, the public comment period is open for 90 days, so go to Regulations.gov and enter it into the docket. There is one more public hearing coming up next Wednesday.

>> TIMOTHY CREAGAN: Sorry. One more request to testify has just come up. Sorry.

Ma'am, could you identify yourself for the record, please.

>> LAURIE VASQUEZ: I am Laurie Vasquez, assistive technology specialist at Santa Barbara City College. We have identified a 508 compliance officer on our campus as of two weeks ago.

>> SACHIN PAVITHRAN: Wonderful.

>> LAURIE VASQUEZ: This is a room where you're singing to the choir. But at the same time, I'm thinking to myself in terms of application, implementation, when this Refresh is done, how do I educate someone who is so involved in our technology on our campus and as a faculty trainer and as a DSPS faculty member? I am covering all grounds, so I really hope that the final outcome of this document will help me at the local level and people like me. That I can take something back to my campus and provide a source of motivation, inspiration, and implementation.

>> TIMOTHY CREAGAN: Thank you.

>> SACHIN PAVITHRAN: Anyone else? Okay. Seeing that I'm going to have colleagues make final comments. Pat.

>> PATRICK CANNON: Thank you very much, Sachin. Sachin called me last week with a provocative question and he said "Pat, do we believe in free speech." I said of course. He said how would you like to give one?

(Laughter)

>> PATRICK CANNON: When I arrived this morning, I told Sachin I had 20 minutes prepared. He said we would like you to cut that down by about 95%. (Laughter) In summary I would like to thank you for being here.

I will say that I have noticed you have been very thoughtful in your comments, very creative and innovative and sensitive. It is obvious that you have reviewed well and have been very thoughtful in presenting some ideas that you're sure we will consider.

I know from experience that sometimes working hard and spending your time, talent and energy in preparing comments and then making those comments and hearing no response is sometimes less than satisfying. Be assured that we have listened well to what you have had to say and do not interpret our lack of response as being a lack of interest. We are indeed interested in what you say and have listened and thank you very much, very much.

(Applause)

>> SACHIN PAVITHRAN: Thank you Mr. Cannon.

Our thanks to all of you for attending. I want to thank our host, the members of the CSUN conference. We really appreciate you giving us a space to make this happen. Once again, we have a public hearing coming up next Wednesday and we do --the public comment period goes for 90 days. Please do go and file comments. We need to hear from all of you.

Thank you. (Applause)

>> SACHIN PAVITHRAN: This concludes our public hearing.