（資料３）障害者の権利条約第５回締約国会議

212 年９月 12 日　ラウンドテーブル１：アクセシビリティと技術
河村宏（DAISY コンソーシアム創始者、前会長）
http://www.un.org/disabilities/default.asp?id=1595

Fifth session of the Conference of States Parties to the Convention on the Rights of Persons with Disabilities, 12-14 September 2012

Conference Room

4, United Nations Headquarters, New York

Roundtable 1: Accessibility and Technology

(12 September, 3 to 6 p.m.)

The first Speaker:

Hiroshi Kawamura, Founder and past President of DAISY Consortium International

CHAIR: let me begin by introducing our first panelist.　Mr. Hiroshi Kawamura. Hiroshi Kawamura is a true pioneer in technology for the People with Disabilities.　He is the founder, past President and a board member of the Digital Accessible Information System, known as the DAISY consortium, which develops International standards for accessible multimedia.

As a librarian, he served the University of Tokyo library for 27 years.　During that time, I understand that he was Chairman of the section of libraries for the blind, under the International Federation Of Library Associations, which resulted in the foundation of the DAISY consortium.　In 1997, Mr. Kawamura became the Director of the information center of the Japanese Society For Rehabilitation of Persons with Disabilities to implement DAISY across the country by the Japanese Ministry of Health and Welfare.

In 2003 he worked at the National Rehabilitation Center for Persons with Disabilities Research Institute to further develop DAISY in the disaster risk reduction context.　He also contributed to the World Summit on the Information Society as the disability caucus focal point to bridge the digital divide.　Mr. Hiroshi Kawamura, you have the floor, sir.

HIROSHI KAWAMURA:　Thank you very much, distinguished Chair. Ladies and

gentlemen, I'd like to share the experience and findings and what we are doing on behalf of the DAISY consortium. And, first, I'd like to represent to you the DAISY consortium official website, which is shown on the screen. All details of what I'm going to say will be found at this site. DAISY stands for Digital Accessible Information System, and the DAISY is -- is something wrong?

The DAISY website is very simple to locate. DAISY. That is DAISY.org. Then you get all information about DAISY.

So let me start with the vision of the DAISY consortium. We have a mission that envisions that a world where people with print disabilities have equal access to information and knowledge without additional expense. And also we have a mission. The mission says the DAISY consortium's mission is to develop and promote International standards and technologies which enable equal access to information and knowledge by all people with print disabilities, and which also benefit the wider community.

And with this vision and mission, we have been striving to change the current publication paradigm, which is mainly based on paper or visual presentation, that enables a group of People with Disabilities and other communities who are not able to read the contents and understand.

So probably you have some questions about what is DAISY? I'd like to show you the demonstration and some flavor of DAISY, to start with. The demonstration I'm going to share with you is a contribution of the South African disability community who developed an HIV/AIDS resource manual to combat against HIV/AIDS. And the DAISY presentation is a multimedia presentation, in this case, and I'm running on the PC with the DAISY playback software, and the contents is the DAISY based on DAISY standard.

(Computer reading)

Disabled people South Africa, page 1. Forward. The disability rights movement through Disabled People's –

HIROSHI KAWAMURA: Okay. So the text on the screen might be too small to read, so you can enlarge it. And also the reading speed can be faster or slower, depending on your choice.

And the structure of the whole text is shown on the left-hand window, and you

can directly choose one of those headings or chapters by selecting visually or you can select one of those with just through audio.

You can skip chapter by chapter. And then if you identify an interesting chapter by audio, then you can go down through the sub section and so on.

So each heading is accessible. So you can jump to some of the sections. Jump to the chapter 3, section 2.

(Computer reading)

Women and HIV/AIDS.

Women's particular vulnerability --

HIROSHI KAWAMURA: Okay. So as you see, for those who can see the screen, when the human voice narrates, you can see the screen and the text highlighted, so that helps people with some type of reading disabilities to understand and locate and focus on the contents.

And for those who are nonvisual users, who can just listen to, they can have an audio presentation and just you can listen to. And then some dedicated DAISY players or free of charge DAISY players on the PC will provide you the direct jump to a specific page or headings or chapter; just like the books on paper.

So with this technology, those who have reading difficulties, including blind and visually impaired people, have the same access to the content for information and knowledge.

And if you have a Braille display attached to the PC or some playback device, then you may have a Braille output. So you can read by finger.

So this is all about what makes DAISY different from the electronic text or just simple audio.

The second presentation is about the disaster preparedness. In this case, this is a tsunami evacuation manual prepared for a psychosocial disability group living in the most frequently receiving earthquake in northern Japan. And they had a 2.8 meter tsunami when the earthquake hit Japan, but no human casualties there, because of the training.

They again and again drilled themselves. So let's listen to.

(Computer) "The first wave is not always the largest one. A tsunami is usually higher

and stronger at the entrance of a bay or at the tip of a peninsula.   The height and time a tsunami arrives can vary between locations depending upon where the earthquake occurs."

HIROSHI KAWAMURA: So for those of you who are familiar with the autism community, may understand that this application is following the social story or United States text and graphics for understanding.   And the combination of voice, text, and graphics may help understanding.

And we found -- and this was very helpful for people with psychosocial disabilities group, which we collaborated to develop this, and they used this in the -- each group homes and workshops adapted to each place, and again and again trained themselves to be well prepared for a tsunami.

DAISY is also very much useful in the context of education.   DAISY offers a literacy revolution, something like a revolution.   Studies by and for educators identify three basic styles of learning: Auditory, tactile or kinetic, and visual.   Auditory learners prefer lectures and discussions to textbooks.   They interpret the meaning by paying close attention to tone of voice, pitch and speed.

Tactile kinetic learners prefer a hands-on approach.   They may be easily distracted by their need for exploration and activity.

Visual learners often think in pictures and prefer graphical representations of concepts through charts, diagrams or tables.

Some individuals can't be recognized into these three simple learning styles. They may require a combination of two styles to understand and comprehend new materials.   Others may have to adapt to new learning styles as their lifestyle changes.

For example, a visual learner who is experiencing the effect of aging on their eyesight may need to shift towards a more auditory learning style.   Conversely, a youngster who has successfully learned through hands-on tactile methods may need to adapt to move to visual and auditory learning as they enter higher education.

By synchronizing audio, text, and soon video, DAISY multimedia can address the needs of each type of learner.   DAISY hardware player, much like CD players or MP3 players, can be of great assistance to auditory learners who benefit from audio playback, whether presented through a text to speech feature or through human narration. Text through audio DAISY books synchronizes the audio playback with text displayed on

the computer screen for the benefit of visual learners. Easy navigation, this offers tactile learners the opportunity to explore documents and interact with the information in a way that holds their attention and improves their learning.

People with print disabilities such as blindness or dyslexia have benefited from DAISY's synchronized multimedia, which I have shown -- I showed to you -- for more than a decade.

Thanks to the recent development of enough software tools for the production of DAISY multimedia, today everyone can have access to information in a way that best suits their personal learning style.

The United States Department of Education has set out the National Instrumental Materials Accessibility Standard called NIMAS. It's a subset of DAISY. 99 percent similar to DAISY, and refers to DAISY as DAISY evolves. NIMAS may be evolved.

The textbooks from kindergarten to high school, around 25,000 titles of textbooks that are distributed in ink print on paper are now available in NIMAS format and also DAISY format. So the United States is one of the best practice countries to make use of the DAISY standard for the education from kindergarten to high school. And the U.S. DAISY members are now advancing their approach to higher education, including diagrams, mathematical equations, and so on.

So DAISY is the best tool for educational materials not only for elementary level but also for higher education.

So in the -- DAISY is also, as I showed you, very useful in disaster scene reduction. Imagine that you are staying nearby a sea shore in a hotel that may have a tsunami 10 meters high if an earthquake happens. So you need to know when and how to evacuate. It should be before a disaster happens. That is the preparedness.

The travelers tend to be very difficult to read printed material in the language of the local, if you are foreign travelers. And that is the similar situation of those who cannot read printed materials. So in this case to be well prepared for people with those reading disabilities, they should be integrated into the provision of disaster preparedness to travelers and other language speakers, other than the majority language of that community.

If you are well informed and you are very much convinced that disaster happens, where to go, where to evacuate, so then you're safe. And also you can help

neighboring people when, as you evacuate, that is the most important fact we need to see, that lessons learned from Japanese and other mass casualty disasters, only neighboring people may help each other.   Rescue teams may come, but they may come several hours later.   But people need to survive in the first half an hour.   Only neighboring people may help each other.

If People with Disabilities are well informed and have knowledge where to evacuate and how to evacuate and get very good drills, that makes the whole community safer.   So that is the very important fact and findings we have been finding so far from the lessons of mass casualty disasters.

And accessible ICT may have a lot -- an important role to play in this context.

So the DAISY is changing the infrastructure of sharing the knowledge and information.   That will impact on the education and disaster risk reduction, health and so on.

Thank you very much for your attention.

(Applause)

>> CHAIR (Thailand):   Thank you very much, Mr. Hiroshi Kawamura. I think DAISY will probably be of use to people without disabilities as well.   It's been very enlightening.

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>> CHAIR (Thailand):   Thank you very much, Sudan.

Thank you very much, distinguished, delegates for all of your comments and questions.   Now I invite the panelists to offer their responses, in no particular order. May I start from my extreme left. Mr. Hiroshi Kawamura, please.

>> HIROSHI KAWAMURA: Thank you very much for the questions and comments.   I'd like to respond to the questions.   First, DAISY is an open standard to develop accessible information and knowledge in publication format.

So that's a know how, how to create a publication, which is accessible for virtually everybody.

And the tools to produce and play back is a software.   Those softwares are available -- many of them are available free of charge; and open source.   So if you want to know the details of those software tools, please visit the DAISY.org.   So then you can download immediately and you can test.

And furthermore, the DAISY is an open nonproprietary interoperable standard. Therefore, currently, we can find Android based DAISY player, iPad, iPhone, PC, MacIntosh, Linux, almost any platform will do. So therefore I strongly suggest you to take advantage of this free of charge know how. And the DAISY consortium is very much interested in International collaboration to disseminate DAISY in particular in developing countries, where many people, we see that 80 percent of the people with disabilities are in developing areas. So therefore we are very much concerned with the dissemination of our know hows and open standard in developing countries.

And the availability and affordability is the most important factor for dissemination, and eventually the equal access to information and knowledge of People with Disabilities.

We have decided to merge with the commercially available electronic book industry standard, which is called EPUW. The most current version of DAISY 4 and EPub3 are identical. Our DAISY developers team has contributed to the core of EPub for navigation and accessibility. So therefore EPub has the same specification which allows the accessible publications, just like DAISY.

And the most current DAISY and EPub has a capacity to synchronize motion pictures to text. That means sign language interpretation could be synchronized with the presentation of visual text contents. As well as for those who have intellectual or learning disabilities may have difficulty to understand the textual content. So therefore the synchronize the motion pictures will help the comprehension of the content.

So therefore we have been piloting in the area of education and also disaster risk reduction, which is an issue of life.

So as I present an example of a disaster risk reduction application, we have been studying how to present the content, which is easy to understand for everybody, including people with intellectual disabilities or learning disabilities or other disabilities or language capabilities. The easy to read concept of publication plus synchronized text, audio and motion pictures will help better comprehension.

So that is the way forward for the DAISY for the next step.

Thank you.

>> CHAIR (Thailand): Thank you very much.

Now I give the floor to Miss Imaculada Placencia-Porrero.

>> INMACULADA PLACENCIA-PORRERO: I'll try to address some of the

comments and issues raised by many of the interventions.   In particular, related to the issue of financial support, and I would like to refer to quite a number of ongoing technological developments in the area of the Web, where more and more assistive types of solutions are placed in the clouds.

So let's not forget that on one hand we have been discussing a lot of commercial solutions.   But there is also an immediate number of solutions, software programmes, and assistive features that are placed in the Web for free.   And this is an area that is more and more being developed and can further be exploited.

Related to the Question placed with the Commission about how guidelines should be developed, I would like just to highlight two things.   Today around the world there are plenty of guidelines and standards.   Some of them are proprietary and you need to pay for them, but many of them are free of charge and they are in the public domain.

The value of these accessibility standards is in the fact, in the nature of being a standard, of being used by a lot of people.   So if you are looking to addressing new, developing new rules on accessibility in your country, I think that one very valuable thing is to use what is available, not to reinvent the wheel.   But try to connect to international publicly available standards.   This will have an impact in the long run in the price of accessible solution, because there would be larger markets.

To finalize, I would like to say that what we have seen in looking to successful examples of accessibility in countries around the world, what we see is that those countries that seem very successful have got clear rules with clear references and standards that could be used for monitoring compliance.   We have not discussed that today.   Monitoring of compliance with the accessibility standards.   They have clear rules for enforcement of the accessibility requirements, and they have a long-term plan, meaning that there is this issue of prevention be put in place without compromising the requirements.

The requirements are demanding that the time and the investment might require more time and extending the budgets available.

But the rules, the standards, the preference material for accessibility should be as much as possible based on this International standard and being -- addressing really the key issues of accessible.

Thank you.

>> CHAIR (Thailand): Thank you very much. Moving on, I move it forward to Ms. West, please.

>> FRANCES WEST: I want to echo the previous speaker's comment about the cost of ICT has really changed significantly in the past five years. I think five or ten years ago, when you talk about ICT, a lot of times the assistive technology is created for individual use, and therefore the individual who has a disability bears all the economic burden of acquiring that technology.

But the technology has evolved and also the market has evolved to the point of where a lot of companies on their own are willing to build technology into their mainstream product. I think Apple is probably one of the best examples.

So I don't think in today's environment the cost is as much, especially with the introduction of the cloud computing. For those of you who are not familiar with the cloud computing, if you are a Facebook user or Amazon user, you are basically buying and transacting in the cloud. So what this kind of a new technology actually can allow a consortium of companies or in this case countries to come together to say okay, let's pool our resources. This could be financial resources, to say make all of our Web sites accessible. That is doable from a technology standpoint, but it's a matter of the policy of the Government, whether you want to have that kind of a collaboration.

I think standards is extremely important. In order for private public collaboration, private companies need to know that when they invest in producing a product or services, that they have the opportunity to sell it in different markets. So as much as you can create your legislation and following into national standards, I think you're going to see more choices and more options of goods and services that is accessible.

The last but not the least, I think if accessibility is a priority for your country, then that priority could be built into your kind of resource collection process. In some countries, I think they use universal service fund as a way of funding accessibility infrastructure. I meanaccessibility infrastructure is just like roads. It's an infrastructure investment. So if you think of it that way, then you can think of a way of finding an avenue of identifying the fund source.

And the last thing is that the best way to encourage a private sector to participate is not always use a stick. Sometimes sticks work, but sometimes using Carrots is usually better. It's more sustaining.

117

You know the procurement law in the United States, Section 508, that is a very good example of a U.S.   Federal Government using and leveraging their buying power, because the United States Government is a big customer.   So by putting a procurement law in place, and that Section 508 specifically talked about, as a Government, when I buy your goods and services I want you to be accessible based on certain International standards, that sends a message to business.   And we can then clearly understand what the requirement is and build our goods and services accordingly. And for the company who is willing to make that investment, we get award the business.   So that is a very good example of a positive reinforcement of business to participate in helping a country or helping the citizen or helping community to become more accessible.

Thank you.

>> CHAIR (Thailand):   Thank you.   And now interest in Global Compact, Dr. Cruse, please.

>> SEAN CRUSE: Thank you Mr. Chair and to the delegates for the interesting and important interventions.   There were several interventions that were specific about the role of the Global Compact and how it could be leveraged in this space.

And to me, it absolutely could.   I think that there are some models that have developed over the past few years, particularly in terms of gender equality, where working in a multi-stakeholder fashion with other partners within the UN system, particularly on that project, UN women, the decision, you know, came to the point that it would be really effective and important for the private sector, for Governments, for civil society to develop a set of principles specific to empowering women in the workplace, the marketplace, and the community.   This has been a successful model that the principle launched in 2010 and have continued to develop a platform around it.

I did not come into this session today necessarily with the intention of, you know, moving toward principles for accessibility.   However, I mean, if that's the interest, if we have people onboard, if that's where we really think it would be the important way forward on this issue, I think it's something absolutely worth exploring.

The think the Global Compact's interest would be to continue to use its convening power to bring businesses to the table, but also to bring our other stakeholders to explore what steps would really make the most sense and be most effective in ensuring the rights of People with Disabilities, similarly in the workplace, marketplace, and

118

community.

So I see this, today, as an opportunity for us to start the dialog and to see where this means moving forward.

Again, I mean, just to clarify, when companies are signing on to the Global Compact, their interest is in internalizing these principles into their strategies and operation, and supporting UN goals by taking actions.

We don't force or require companies to make contributions. We feel that would be not the whole picture. We want companies to internalize the principles and really making meaningful steps towards implementing the principles and ensuring UN goals in their communities and where they operate. And feel that when they sign-on, if it was more just about a contribution, it wouldn't be the full picture.

Just to clarify that, even in preparing the principles a gender equality, and a similar one on children's rights which was launched earlier this year, it's a collaborative process. We bring businesses to the table to talk about how they could really benefit from these principles moving forward. So I think that this is something perhaps to explore for sure.

There was another comment about the presence of the Global Compact or the responsible business programs in at least developing countries. 10,000 participants are found in 140 countries around the world, including many of the least developed countries. In order to assure this locally, we have established a local network system. In 100 countries around the world, including 10 of the LDC countries, we have things established that are really developed at the grass-roots level. So this could be business led, developed by a UNDP office, or another conglomerate of organizations that have come together to strategize and determine: What do these principles mean in the local context? What UN goals are really most pressing and important to have a multi-stakeholder approach to? And especially how can the private sector help locally? So there are many countries around the world that have local networks. If you visit UNGlobal Compact.org, you can see the countries. Feel free to reach out to them and see where they are in their priorities and how you can move into this stays space. So this doesn't work top down. It's local networks coming up and determining their own agenda and their own way forward.

We suggest highly at times that they could take on certain activity, but it's always the decisions are made locally with that system.

I think I've answered all the Global Compact Questions, but I'll stick around if people have more questions and would like to talk bilatly.

>> CHAIR (Thailand): Thank you very much. We are just out of time. We kept to the time very well. I want to thank the panelists. It was a very rich and comprehensive and engaging discussions. Raised a lot of interesting points as well. But we covered a lot of ground. We have seen where we have been and the possibilities of where we can -- where we are heading.

And I would like to thank also the distinguished delegates for participating in this round table. And I would like to -- I'd like you to join me in a round of applause for our distinguished panelists.

Thank you very much.

(Applause)

(End of session)

6:05 p.m. ET)