

# **Joint ITU - AICTO Workshop on “Interoperability of IPTV in the Arab region”**

**(Dubai, UAE, 20 – 21 September 2011 )**

## **IPTV for All: Opportunities and Challenges**

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# Background

The Global Forum on Disability in the Information Society held in Geneva 2003 and in Tunis 2005 as one of WSIS events adopted the Tunis Declaration on behalf of the 600 millions of persons with disabilities in the world.

“persons with disabilities and our needs be included in all aspects of designing, developing, distributing and deploying of appropriation strategies of information and communication technologies, including information and communication services, so as to ensure accessibility for persons with disabilities, taking into account the universal design principle and the use of assistive technologies” (Tunis Declaration [http://www.dinf.ne.jp/doc/english/prompt/051118\\_declaration\\_wsisis.html](http://www.dinf.ne.jp/doc/english/prompt/051118_declaration_wsisis.html))

Convention on the Rights of Persons with Disabilities (CRPD), which reflects the WSIS basic documents and the Tunis Declaration, is ratified by more than 100 countries and enacted as a legally binding UN human rights convention.

The DAISY Consortium has been implementing the WSIS plan of actions and CRPD.

# Variety of ways of reading DAISY



# DAISY Consortium Vision & Mission

<http://www.daisy.org/>

## ■ Vision:

Everybody in the world including persons with print disabilities have equal access to information and knowledge, without delay or additional expenses.



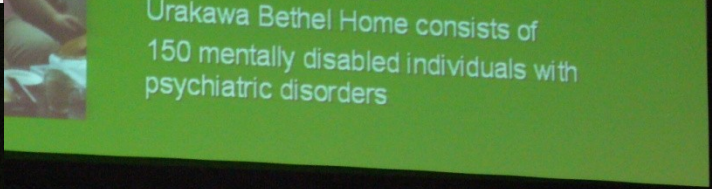
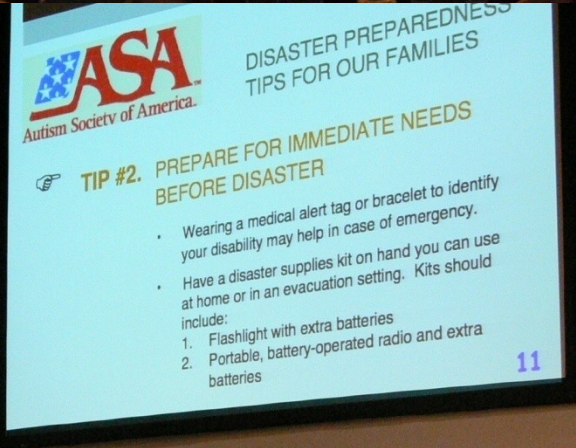
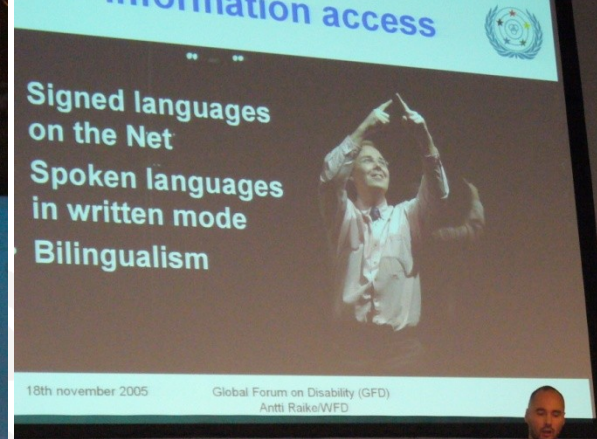
## ■ Mission:

To develop and promote international standards and technologies which enable equal access to information and knowledge by all people including those with print disabilities and which also benefit the wider community.





# WSIS 2005 in Tunis



# Tunis Commitments

18. We shall strive unremittingly, therefore, to promote universal, ubiquitous, equitable and affordable access to ICTs, including universal design and assistive technologies, for all people, especially those with disabilities, everywhere, to ensure that the benefits are more evenly distributed between and within societies, and to bridge the digital divide in order to create digital opportunities for all and benefit from the potential offered by ICTs for development



# UN Convention on the Rights of Persons with Disabilities

## Article 2: Definitions

For the purposes of the present Convention:

“Communication” includes languages, display of text, Braille, tactile communication, large print, **accessible multimedia** as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible information and communication technology;

“**Reasonable accommodation**” means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms;

“**Universal design**” means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude **assistive devices for particular groups of persons with disabilities** where this is needed.

# Developing Countries Inclusive

- AMIS open source development and localization.
- WIPO Treaty initiative for the Global Library.
- HIV AIDS multimedia resource manual in 4 South African official languages.
- ITU Workshops: Zambia, Thailand, Mongolia





# ITU World Telecommunication and Information Society Award 2008

## Connecting persons with print disadvantaged

- Beneficiaries of DAISY:
  - Persons with print disabilities
  - Speakers of minority languages
  - Speakers of indigenous languages without written scripts
  - Those who are illiterate



# Phuket Conference on Disaster Preparedness

International Conference on Tsunami Preparedness of Persons with Disabilities  
11-12 January 2007

Phuket, Thailand







**Ookawa Elementary School** was hit by Tsunami on 11 March 2011. Only 34 students out of 108, and 3 teachers out of 13 survived.

photo: <http://photo.sankei.jp.msn.com/panorama/data/2011/0324ookawa01/>

NHK: <http://www.youtube.com/watch?v=fXwu1sHoJbg&feature=related>

BFMTV: <http://www.youtube.com/watch?v=wpNk374GLCs&feature=related>



# Facts learned from 3.11 Disaster

- People must start evacuation immediately
- 10 m high Tsunami bank was destroyed
- 3.11 Tsunami reached as high as 40 m above the sea level
- Similar mega earthquake and Tsunami hit similar area about 1300 years ago.
- Nuclear power plants built at sea front need to be re-examined its safety
- Twitter, Google map applications and videos on the internet were widely used

# Who are Vulnerable in disasters?

- Those who are not able to:
  - Understand the situation
  - Communicate
  - Locate the evacuation route
  - Evacuate
  - Isolated from the community
  - and small children, travelers, those who are pregnant, who require medical treatment, etc.

# Digital Inclusion in DRR

- Sharing life-saving information and knowledge through inclusive ICT is the key to empower everybody including those who are vulnerable in disasters

DAISY multimedia resources on disaster preparedness and support for victims is available at:  
<http://www.dinf.ne.jp/doc/daisy/jdc/index.html>

HIV/AIDS resource manual in 4 South African official languages are available at:  
<http://www.normanet.ne.jp/~atdo/english.html#download>



# Accessible ICT Standards

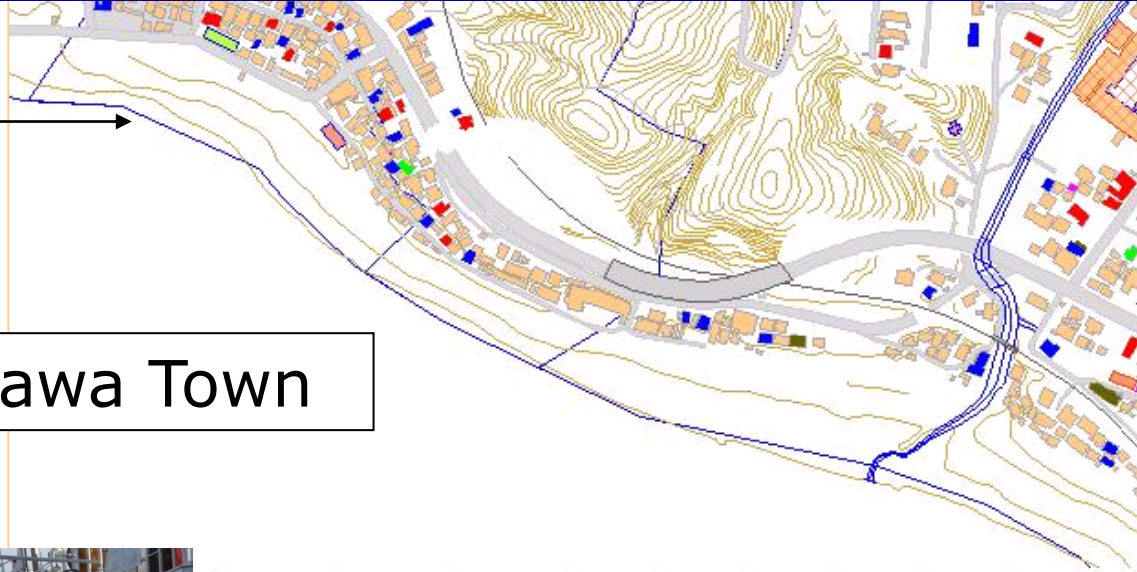
“Two important developers of technical standards for accessible ICT products and services are the W3C Web Accessibility Initiative and the DAISY Consortium.”

WHO/World Bank, *World Report on Disability*, 2011. p214  
([http://www.who.int/disabilities/world\\_report/2011/report/en/](http://www.who.int/disabilities/world_report/2011/report/en/) )

DAISY Standards: <http://www.daisy.org/>

Web Accessibility Guidelines: <http://http://www.w3.org/WAI/>

# Tsunami Evacuation training of Urakawa Bethel's House for 150 people with severe psychiatric disability using DAISY multimedia



Urakawa Town



# DAISY multimedia manual for Tsunami Evacuation

セミナーハウスからの避難経路 - EaseReader

大きな揺れがおさまったら  
とにかく警報を待たず、身一つではしって  
近くの高台へ早く逃げましょう。



Ease Reader

The image shows a screenshot of the EaseReader software interface. At the top, the title bar reads 'セミナーハウスからの避難経路 - EaseReader'. The main content area displays Japanese text: '大きな揺れがおさまったら' (When the big shaking has subsided), 'とにかく警報を待たず、身一つではしって' (Regardless, don't wait for an alarm, run with your body), and '近くの高台へ早く逃げましょう。' (Run quickly to a nearby high ground). The second and third lines of text are highlighted in yellow. Below the text is an illustration of a blue tsunami wave on the left and a cartoon character wearing a white helmet and running up a green hill on the right. At the bottom of the window is a control panel with various icons for navigation and playback, including a play button, a volume slider, and a search icon.

- Go straight to the point
- Tell what to do rather than what should not be done

- Use favorite or familiar
  - characters
  - pictures
  - drawings
  - voices
  - favorites
  - places
  - tastes
  - Music, rhythms

- Understanding by brain and by body both



# Requirements for accessible standards

- Open
- Non-proprietary
- Inter-operable
- Free of charge or with minimal fees
- With proven track record of accessibility
- Accepted by main stream industry: Web, Publications and Broadcasting

# Conclusion

- e-accessibility has key role to develop consensus and evidence based inclusive society
- accessible IPTV development in harmonization with existing accessibility standards with proven track record such as W3C/WAI accessibility guidelines and DAISY standards is strongly recommended
- critical user requirements of IPTV accessibility features will be gathered from disaster issues and effectively implemented with multi-stakeholders approach
- Thus, IPTV accessibility development will support Implementation of the CRPD and WSIS Plan of Actions