Draft DCAD Substantive Paper for IGF 2017 DCs Main Session

1. Introduction

Since the approval of the UN Convention on the Rights of Persons with Disabilities (CRPD) in 2006, much efforts have been made to achieve an inclusive society for everyone, including persons with disabilities and persons with specific needs. Their voices are starting to be heard, and the progress is reported in participation of persons with disabilities in decision-making processes at national level. However in many countries, this is still an area for improvement.

To facilitate interaction between relevant bodies and to ensure that ICT accessibility for persons with disabilities and those with specific needs is included in the discussions around the Internet Governance, Dynamic Coalition on Accessibility and Disability (DCAD) was formed during the second Internet Governance Forum (IGF) in Rio de Janeiro (Brazil) in 2007. DCAD aims to help create a future where all individuals have equal access to the opportunities through ICT.

DCAD members now consists of around 70 mailing list subscribers, made up of representatives from organizations for persons with disabilities, UN agencies, international organizations, policy makers, industry, academia, civil society and experts on accessibility, from both developing and developed countries of all regions of the world. International Telecommunication Union (ITU) provides DCAD with secretariat support.

As one of the activities of DCAD, it reviews accessibility of IGF meetings each year and report to IGF. While it is generally felt that accessibility of IGF meetings improved thanks to the efforts made by all concerned parties especially the host countries, there still are a lot of barriers for persons with disabilities to appropriately participate in the meetings. These barriers may not be felt by the others than those who are concerned, thus a review process by accessibility experts is necessary. This is an important step to achieve a truly inclusive society.

Furthermore, to raise awareness of the fact that there are a number of areas of accessibility concerns, DCAD addresses and discuss selected issues raised by its members. This year, DCAD focuses on universal design, to better understand what the issues are considered around ICT accessibility.

"Universal design" is defined by UNCRPD Article 2 and 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.

Every single person can be permanently or temporarily disabled due to physical, environmental (e.g. a phone call in a noisy environment) or cultural (e.g. spoken language diversity) conditions. It is important to note that universal design is beneficial for the entire community. The following paragraphs provide brief descriptions of related topics, which will be further discussed at the DCAD/G3ict workshop on "Universal Design and Creating an Accessible Global Digital Future" (WS 54).

2. Some Topics of DCAD's focus at IGF 2017

2.1. Key concepts of universal design

2.1.1. Universal design, principles and practice

(by **Gunela Astbrink**, Women With Disabilities Australia)

Universal design (sometimes called inclusive design) means products and services are designed to meet the needs of the majority of the population taking into account age and ability.

The principles of universal design are:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive to Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

Accessible websites and smart phones are just two examples of putting universal design into practice. Challenges exist especially in developing countries where affordability and lack of awareness are major considerations.

2.1.2. Impairment, Disability and Universal Design: Key concepts for Accessibility

(by **Gerard Ellis, Feel The BenefIT)**

UNCRPD differentiates between impairment and disability. It also acknowledges Universal Design as a key concept for accommodating the needs of persons with disabilities and older persons. This presentation will investigate the difference between the 3 terms. It will also demonstrate how the accessibility of products, services and environments can be improved or disimproved without altering a person's impairment or even when no impairment is present.

2.2. Importance of ICT standards on accessibility for universal design

Accessible ICT implies interoperability, and standardization is one way to provide interoperability. A lot of work is being done by international organizations to develop international standards on accessibility to meet rapidly evolving ICT environment. Examples of standards are described below.

2.2.1. Next Generation Web Accessibility Guidelines

(by Shadi Abou-Zahra, World Wide Web Consortium (W3C))

The accessibility guidelines of the World Wide Web Consortium (W3C) are the international standard for web content, user agents, and authoring tools. Particularly the Web Content Accessibility Guidelines (WCAG) has been adopted by many organizations and governments around the world, including in Europe, the United States, and Japan. This presentation introduces the next generation of these guidelines to better address mobile and connected devices, augmented and virtual reality, and many more current and future technologies on the internet.

2.2.2. Standardization efforts at ITU for an accessible global future

(by **Masahito Kawamori**, ITU-T Q26/16 Rapporteur, Keio University)

ITU is playing an important role through its activities and efforts in making ICT accessible and achieving inclusive society. One of the ITU accessibility activities is standardization at ITU Telecommunication Standardization Sector (ITU-T): Standardization makes it possible on a global scale, to connect equipment and services from different manufacturers. The most important goal of ITU-T's accessibility activities is to make sure that newly developed standards contain the necessary elements to make services and features usable for people with as broad range of capabilities as possible. Standardization efforts made at ITU-T Q26/16 "Accessibility to multimedia systems and services" as well as other groups within ITU will be described.

2.3. Case study from developing countries

2.3.1. ICT Accessibility in Pakistan: Challenges and Opportunities

(by **Muhammad Shabbir**, Board of Directors of ISOC Islamabad Pakistan Chapter)

The ICTs offer many new and affordable opportunities equally to all of us, whether persons with disabilities (PWDs) or not. Some of the advantages of ICTs for PWDs include: easy knowledge acquisition, enhanced communication, opportunities for higher education and improved employment prospects. Notwithstanding the benefits, in most of the developing countries, the prospective gains promised with the digital era, have not yet become the reality for most of the PWDs due to a variety of challenges/ barriers. Moreover, due to the huge difference in low income and high price of new devices and softwares, the gap of available technologies for PWDs between developed and developing world is increasing day by day.

In this context, this paper presents the case study of Pakistan's experience with ICT accessibility for PWDs as a developing state and discusses the challenges and opportunities in the way. The challenges relate to: availability of technology, its affordability, awareness about the technology and universal design, and willingness of the people to adopt it. Despite the aforementioned challenges, taking advantage of accessible technologies, PWDs are contributing in many professions ranging from academia, management, research, civil services to policy relevant circles and playing their role in national development.

The key questions for the study are: How and in what ways Pakistani PWDs are taking advantage of ICTs? What are the challenges and opportunities in the way? And how the state of ICT accessibility can be improved for developing countries?

The study argues that the appearance of PWDs in superior services exams; Pakistan being a ratified signatory to UNCRPD; PTA conducting the national level Mobile App Award 2016 under the theme: "Embracing Mobile Accessibility for PWDs"; and, Pakistan's National IT policy 2017 dedicating a section to address the concerns of PWDs are all indicative of positive signs for the future of accessible ICTs in the country.

The UNCRPD specifically mentions terms for assistive technology in eight of articles 4-32 (4, 9, 20, 21, 24, 26, 29, and 32). Measures that could include assistive technology (e.g., take all

appropriate measures) are mentioned in an additional 17 articles. Signatories to the CRPD have committed to accessibility for PWDs and to international cooperation, both technical and economic. To comply with the CRPD, national governments should implement measures to meet citizens' needs for assistive technology, and governments and international organisations with available means should provide technical and economic assistance to developing countries to access, share, and transfer assistive technology. Therefore, development of strategies and methods for effective collaboration in this domain would help bridging the ICT accessibility gap between the developed and developing countries. Additionally, accessibility and usability for PWDs should sit at the very heart of the ICTs policy, planning, design and implementation processes and not as standalone/independent or add-on venture. Lastly, ensuring the access of PWDs in developed or developing countries to the same technology, at the same time, and at the same price as the general public receives, should be the ultimate aim to achieve.