

# Inclusion of People with Disabilities through Information and Communication Technology

**20<sup>th</sup> December, 2018:** A stakeholder dialogue was organized on 20<sup>th</sup> December 2018 at Federation House, New Delhi on Inclusion of People with Disabilities (PwD) through Information and Communication Technology.

The session started with Mrs. Uma introducing everyone about the topic. Then it was passed on to Ms. Karishma from Microsoft who discussed how inclusion and accessibility should be the top priority and how the White Paper aims to include challenges and how those challenges can be addressed regarding the procurement policies, international standards, Indian standards and offer recommendations to the government to seal the gaps in existing policies.

Mr. Ankit Jindal from DEOC (Diversity and Equal Opportunity Centre) presented key points of the White Paper through a PowerPoint presentation. He gave a small introduction on PwD's statistical profile and how many people are educated and are in poverty. There are 2 types of ICT- Mainstream and Assistive Touch. Mainstream includes computers, smartphones, etc. while Assistive Touch (AT) includes screen readers, Braille Displays, one hand keyboards, etc. Advances in Artificial Intelligence, robotics and other smart technology is resulting in convergence of mainstream and AT like Home automation (Alexa, Cortana), smart speakers, self-driving cars, etc. Lack of enforceable policies and will, limited awareness of ICT potential, unaffordability of ICT and AT, unavailability of products & in rural areas, inaccessibility of products, platforms and content (not every person is well-versed), absence of ecosystem, no scientific assessment criteria (needs are different of each person and also technology quotient cannot be assessed) etc. are some of the barriers for ICT adoption.

International best procurement policies were discussed like Information & Communication Technology (ICT) Standards & Guidelines" for Section 508 of the Rehabilitation Act & Section 255 of the Telecommunications Act of 1996 in US states that if a person wants to do business him/her have to make their product accessible. Technical standards are WCAG 2.1 (Web Content Accessibility Guidelines), ATAG (Authoring Tools Accessibility Guidelines), UAAG (User Agent Accessibility Guidelines), etc. Start-ups should follow these guidelines for accessibility.



Highlights and Lowlights of government and ICT accessibility (A11Y) were discussed.

**Highlights** were- Information and Broadcasting Ministry made sub-group on information accessible on television, revised GIGW (Guidelines for Indian Government Websites) in 2018, Department of PwD announces 100+ websites made accessible, etc. **Lowlights** were slow implementation of Accessible India Campaign (E-Pathshaala not accessible), lack of holistic thinking on ICT access and 80 percent of the funds from the ADIP scheme is spend on ALIM CO, not on ICT.

Some of the Recommendations for TRAI were mentioned:

1. Should form steering committee under the aegis of Department of Empowerment of PwDs with members from DoT, MIB, MeitY, Ministry of Corporate Affairs and Ministry of Finance.
2. To facilitate accessibility of emergency services by PwDs. separate desks in each Public Safety Answering Point to be set up where attendant executive should accept calls/SMS/Social Media calls from PwDs & provide them assistance. The desk would also have a relay centre to cater to requests from deaf & speech impaired people.



Highlights of Business and ICT A11Y are- Bodies such as FICCI and NASSCOM are generating awareness; and AI based solutions can be seen such as Seeing AI and Soundscape. Lowlights are- Limited awareness related to the RPwD Act, no sense of urgency to make services accessible by June 2019 and Corporate CSR not prioritizing A11Y.

**Highlights** for Civil Society and A11Y are academic institutions such as IIT-Delhi, IIT-Madras and IIT-Bangalore are making prototypes, but they remain at the prototype stage only and next generation NGO's can be seen like- Friends for inclusion and Vision Empower are to name a few. Lowlights are- lack of consistent advocacy with stakeholders, limited exposure and capacity to assess and adopt latest technology and fragmented efforts.

#### RECOMMENDATIONS-

1. Setting up disability units in all ministries to ensure all schemes & initiatives are inclusive of PwD and align spirit of RPwD
2. Adopt and enforce standards for Public procurement that mandates accessibility features in procurement of all ICT product and services
3. FastTrack the establishments of a Universal Design Institute that will promote, research and build capacity of stakeholders on standards to make a range of products and services accessible

4. Revamp the ADIP scheme that assist people to procure Assistive Technology. Revised scheme should have a scientific method to assess the AT needs based on functionality that supports all disabilities, doesn't have an income ceiling and keep the pace with the latest technology.
5. Provide financial incentives to OEM, startups and other stakeholders to research, develop & commercialize products.
6. After the presentation by Mr. Ankit Jindal, the panel members introduced themselves and gave suggestions how ICT can include PwDs. Suggestions are-
  1. Mr. P.V.M. Rao, IIT-Delhi says that 2 of their prototypes have reached PwDs. Inclusion requires to connect the stakeholders to each other. Rate of exploitation is less than rate of obsolescence.
  2. Mr. J. S. Khurana from Indian Alliance Patients Group told how their patients have made connected on a WhatsApp group so that they can communicate with each other.
  3. Mr. Anuj Jain, Executive Director of NAD gave the following suggestions-
    - a. NCERT books have tough language which will be difficult to understand in sign language.
    - b. For example if PM is giving speech, there should be Video Relay Interpreters
    - c. There should be a list of official interpreters for organizations
    - d. Public screens should have captions or sign language
    - e. There should be app for deaf parents, so that they can be notified when their baby starts crying.
  4. Mr. Neeraj Chawla, Director of Muskaan states that there should be different models for training and employment.
  5. Procurement policies should be non-negotiable and accessibility audits should be done.
  6. Mr. Arun Mehta from Bapsi said that technology available is very expensive, should think of low cost solutions, in the process of technology development PwDs should be involved and trainers also need to be trained for better understanding.
  7. Ms. G. Syamala, Executive Director of AADI, states that there is no focus on rural areas where majority of the PwDs are present. The why and what are known, but how it is going to be implemented is unknown.
  8. Ms. Manshul V Belani, a PhD scholar from IIIT-Delhi suggests that ICT can be used in vocational training. There are 50-60 skill sets for general category but 10-11 for PwD. These skills can be expanded.
  9. Dr. Jayanti Pujari from Amity University, Faculty of Rehab Sciences suggests that training in daily chores and female hygiene should also be provided for caregivers.

10. Ms. Sheila George from ASHI Foundation says that technology available in India do not comply because of accent. It should be available in Indian accents.
11. Mr. Dipendra Manocha, Director of Daisy Consortium states that less than 1% PwD have access to technology, it is not reaching desirable number of persons.
12. Startup ecosystem should be evolved which involves PwDs.

