



# Xavier's Resource Centre for the Visually Challenged

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Re: Response to Consultation Paper No 17/2017 on Making ICT accessible for persons with disabilities

Dear Sir

We deeply appreciate the initiative taken by TRAI to resolve the the issue of enabling ICTs for persons with disabilities and seeking consultation on this.

The XRCVC was started in 2003 as an effort to ensure an inclusive environment at St. Xavier's College, one of the most well-known educational institutions in the country, for its students with blindness and low vision. Having created an inclusive set-up for its own students, keeping with the college's long tradition of creating social impact within the larger community, the XRCVC has today become a national advocacy and support centre for the blind and low-vision across the city and the country. We constantly endeavour to promote creative accessible solutions and have been at the forefront of many such initiatives — particularly the introduction of truly accessible ATMs in India.

We would be delighted to engage with TRAI in all future initiatives concerning inclusion for Persons With Disability (PWD).

We have humbly and respectfully enclosed our responses to the questions in the Consultation Paper. Although our responses can be applied across disabilities, our focus is more on blindness and low vision since we have accumulated expertise on the same over the years.

Thank you.

Yours sincerely,

*S.M. Taraporevala*

Dr. Sam Taraporevala

**Q1. Which are the disabilities, with specific accessibility requirement, other than those mentioned in para 2.3 that require consideration for preparing a framework?**

**Answer:**

More types of disabilities that can be included are:

1. Multiple Disabilities including deaf-blindness – need touch and feel access
2. Locomotor Disability – physical access to service outlets and buildings
3. The best case solution is when globally accepted accessibility standards are identified and adopted as this will ensure that accessibility is available to all persons, irrespective of disability type.

**Q2. Apart from the challenges enumerated in para 2.3, what other challenges do PwDs face while accessing telecommunication and broadcasting services?**

**Answer:**

The challenges are enumerated below:

- Pursuing a career in the field of radio and television for Visually Impaired and low vision persons. Access to job specific applications and equipments, e.g. editing, reading print, etc.
- Equipment operating instructions / manuals by the service providers are usually not in accessible formats.
- Most apps are inaccessible, and this has created barriers for visually impaired persons to be on par with non-disabled persons. Telephony service providers apps such as My Jio, My Vodafone, My Airtel, etc. are all having major accessibility challenges. Also, this inaccessibility deprives visually impaired persons from viewing online streaming movies on demand and TV channels services provided by these TSPs.
- Most phones available today are touch screen smart phones. We need to have some of the latest models with physical keypad option. Accessing physical keypad enhances mobile accessibility for visually impaired persons. But these models with physical keypad should have all the existing features.
- Text to speech solutions for all Indian languages
- Voice-recognition-based menus across Indian languages

**Q3: In your opinion, what are the reasons for the desired benefits of ICT (telecom and broadcasting) not reaching the PwDs despite several policy measures and scheme being implemented?**

**Answer:**

1. It is possible that real stakeholders are not made part of the initiatives.
2. The mindset of many leaders/managers is to conduct accessibility just as a tickmark activity but not as a real accessible solution.
3. Lack of push from the senior management / leadership in the organizational hierarchy on ICT/web accessibility.
4. No consistency maintained about the initiatives.
5. Due to transfer of staff, following up on initial activities on the accessibility are interrupted.
6. There is no proper audit.
7. There is no proper grievance systems for Persons With Disability to raise the issue.

9. Mostly disability services come under Corporate Social Responsibility which may be one of the reasons for poor execution.
10. There is no clear identification of accessibility standards
11. Not enough awareness among stakeholders and the government
12. No training and monitoring systems in place to implement accessibility
13. Many well-intentioned initiatives are stuck in red tape and bureaucracy
14. Stereotypical mindsets

**Q4: What additional or corrective measures can be taken by the Government to enable better access to telecommunication and broadcasting services and devices by PwDs? Please give a rationale for your response.**

**Answer:**

- The Government should make ICT accessibility a ‘must’ clause for sanctions, funding and all its procurements.
- The Government should strictly implement RPDA 2016 by setting up Disability and Accessibility Advisory Committee.
- India needs to have an act similar to “Twenty-First Century Communications and Video Accessibility Act (CVAA)” by US - The CVAA updates federal communications law to increase the access of persons with disabilities to modern communications. The CVAA makes sure that accessibility laws enacted in the 1980s and 1990s are brought up to date with 21st century technologies, including new digital, broadband, and mobile innovations.  
<https://www.fcc.gov/consumers/guides/21st-century-communications-and-video-accessibility-act-cvaa>
- Compliance and mandatory acts will increase ICT accessibility in India. This is similar to the American Disability Act (ADA) and its implementation in the US has resulted in better accessibility of websites, equipment and services in the US for PWDs.
- Incentivisation to be provided
- Census methodologies need to be streamlined better so that we obtain accurate disability data
- Regular feedback surveys from users.

**Q5: Apart from the measures suggested by ITU, what additional measures can be taken by the TSPs and equipment vendors/suppliers and other stakeholders to address the challenges faced by PwDs while accessing telecom and broadcasting services?**

**Answer:**

- Commercial movie makers can be encouraged to make audio described movies. In the last 3-4 years many movies made by Aamir Khan are released on audio-described DVDs
- Cinema halls should have the facility to screen audio-described movies (inclusive viewing by VI).
- Tickers on the screen to be audio-described for VIs. There should be a button on the remote to read ticker info.
- Government documentaries and advertisements should be made accessible with audio description and sign language.
- There should be a 50% tariff plan for VI by the telecom operators, an additional tariff benefits to VI for voice and data.
- All apps and websites should be made accessible in the areas of telecommunications and broadcasting.

**Q6. What are the areas where collaboration between various stakeholders would be useful and how?**

**Answer:**

- Engaging real PWD users of the services at all the levels to test, plan and implement the accessibility solutions.
- Collaboration with disability groups and NGOs working in the related field of ICT accessibility.
- Allocating funds to promote innovation and research

**Q7. Should the Government/TRAI direct the telecom and broadcasting service providers to provide information pertaining to billing, usage, pricing and contracts in the form accessible to PwDs? Please provide a rationale for your**

**Answer:**

Yes. Billing, usage, pricing and contracts need to be made in accessible formats. For example, in Braille, large font or accessible pdf/ epub format for the visually impaired as per their need. This also encourages independent living for visually impaired.

**Q8: Should the Government/TRAI mandate that the devices used for watching television provided through cable, satellite/DTH, fibre, etc. should be made accessible to PwDs?**

**Answer:**

Yes. Accessibility is needed. Future Internet of Things (IoT) devices and remotes, on screen menus should also be made accessible.

Set-top boxes and DTH should be made fully accessible with voice menu in regional languages as well.

**Q9. Should international accessibility standards be adopted for telecommunication and broadcasting services and devices in India? Please suggest steps required to ensure their adoption by the service providers/device manufacturers.**

**Answer:**

Definitely yes.

- Forming and publishing policy.
- Amending acts to make compliance to accessibility standards a mandate.
- Evaluation of the current services and products
- Making current services and products accessible to the maximum extent possible.
- All new products and services must have out-of-the-box ICT accessibility.
- RFP with mandate on ICT accessibility.

**Q10. What additional measures can be taken or technologies can be deployed by service providers or equipment manufactures to assist PwDs?**

**Answer:**

Special STB / TV remote controls with large, bold, good contrast key label for low vision and senior citizens which are also user friendly / talking for VI.

All service providers to clearly indicate on their websites their accessibility policies and provisions.

Effective training of customer care personnel to handle accessibility queries

Physical premises for customer grievance units to be made fully accessible.

Any e-wallet or service mobile Apps should meet all standards of accessibility.

**Q11 Should device manufacturers be mandated to allow in their device's operating system those applications which are meant to assist the PwDs? Please justify your response.**

**Answer:**

- Mobile manufactures using stock OS have in-built accessibility features such as magnification, contrast, large font, screen reader, etc. But that may not be the case with mobile manufacturers who are using customized ROM / OS make. Their OS and apps may or may not be so accessible.
- Apple IOS devices are mostly accessible to PWDs.

**Q12. What measures can be taken in India so that emergency services are made more accessible for PwDs? Should the implementation of these measures by TSPs be made mandatory by the Government?**

**Answer:**

To make emergency services accessible in India few suggestions:

- Yes, Emergency services accessible apps should be made part of OS. This will provide out-of-the box accessibility to PWDs and elderly.
- Existing commercial emergency services (Fire, Hospital, Blood bank, Police, Electricity, etc.) apps should be made accessible with screen reader and be low vision friendly.
- We should develop standard short codes SMSes for persons with hearing impaired for calling emergency services.
- We can have a voice operated function in the mobile for blind to call emergency services.
- Collect demographic / geographic based data

**Q13. Should the device/handset manufacturer be mandated to manufacture at least one model of handsets for PwDs which is having accessibility features and which are compatible with assistive technology features such as hearing and visual aids including emergency buttons etc.?**

**Answer:**

- Ideally a special model is not required as such from the visually impaired perspective, though other disabilities may require the same.
- As already mentioned in the answer to the question no. 2, today we have mostly touch screen smart phones models available. We need to have few smart phone models which are equivalent to the latest models with physical keypad. No compromise on features or less functional model to be designed.
- Or there are some extended keypad / keypad cover solutions (smart phone accessories) tested (e.g. Eye-D keypad) which can be funded to be developed as fully functional and then marketed with affordable cost for the VI community.

**Q14. How should companies be encouraged to utilise their CSR funds for development of applications, devices and services for the PwDs? What kind of devices and applications can be envisaged/designed to make achieve ICT accessibility for PwDs?**

**Answer:**

- First and foremost, all organizations should make their existing websites and apps accessible as per WCAG 2.0. Those that fight shy of committing business resources for the same may utilize CSR funds for this job.

**Q15. Should any other funding mechanism for the development of applications, devices and services meant for the PwDs be considered? Please give a rationale for your response.**

**Answer:**

Not only CSR but accessibility should be made part of the business model as it will create revenue for service providers.

**Q16. How can effective campaigns be designed to create awareness about use of ICT accessibility tools? Can such campaigns be funded by CSR funds? If not, what other mechanisms can be used to fund such campaigns?**

**Answer:**

Suggestions for creating awareness:

- Engineering syllabus and IITs should have core subjects / topics accessibility as well as universal design.
- Students projects apps/devices should be given marks for accessibility as one of the mandate.
- All the ministries should send Office Memorandum regard to implementation of ICT accessibility to respective departments and sectors under its control with the timeline to implement. For example, MoF can write to all heads of the banks to make their digital banking products accessible as per WCAG 2.0 by June/Dec 2018.
- Majority of leaders, organization heads and senior level executives from different sectors and industries are not aware of what is accessibility for PwDs and WCAG 2.0 and GIGW accessibility standards. The Government should send out communications with regard to ICT tools, assistive devices and web/ICT accessibility to them and may run awareness workshops with the help of accessibility advocates and NGOs.
- Radio and TV programs / advt. on spreading awareness on ICT accessibility

**Q17. Should the Government incentivize the manufacturing and development of ICT tools and devices viz. tools for mobile accessibility, TV accessibility or for web accessibility for PwDs? Please give a rationale for your answer.**

**Answer:**

- The Government may fund promising projects on ICT tools and assistive technologies and should exempt such tools from the ambit of GST.
- For example, NVDA, a free screen reader development can be funded to make it a primary screen reader in India. Commercial screen reader such as JAWS are too costly but visually impaired are forced to use it as it is well developed and supported by a company. In the banking industry last 5 years thousands of JAWS licenses were purchased costing crores of rupees which have gone to dealers and foreign companies.
- Similarly, there is a key need to provide funding for development of an affordable quality video magnifier.
- Also, the government may fund and incentivize the Daisy Forum of India, which is providing lakhs of accessible books to the visually impaired in India.
- Government can incentivise accessible TSPs/Broadcasters every year with an award and recognition.
- Government can think of accessibility ratings for the empanelment for vendors and companies. In 2015, Accessibility index rating program was declared as part of Accessible India Campaign, but the ratings were voluntary so not much response was received.
- Smart city initiatives need to be approved only if they meet accessibility standards. This will ensure effective design, rollout and usage.

**Q18. Please give inputs/suggestions/comments on any other issues which you feel are relevant to the subject matter.**

**Answer:**

Accessibility has oftentimes just become part of a talking agenda in conferences and government campaigns such as Accessible India, without any ground-level changes. The Digital India too campaign can only succeed if accessibility is woven into its DNA.

Hence 'Accessibility needs to move from merely being part of a tick-box to a solution out of the box'

The above points have been submitted by XRCVC in response to the Consultation Paper No 17/2017 on Making ICT accessible for persons with disabilities.

For further information or clarity please contact the undersigned.



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