

Representation from Blind Graduates Forum of India

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

Other than the ones mentioned, Persons with speech impairment needs to be included.

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

- Websites, software and mobile apps from vendors and service providers do not comply with accessibility guidelines which makes them inaccessible for visually impaired persons who access them using assistive technologies like screen reading software, brail displays, etc.
- Most electronic hardware products like Set Top boxes, Smart home solutions, etc are not usable for PwDs as they don't comply with international accessibility standards.
- For instance, the buttons on most of these devices do not possess any tactile notations and audio feedback to allow visually impaired users to interact with them.
- The staff of manufacturer's and service providers is unaware about accessibility as well as the specific requirement of PwDs

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?

- Most policies are guidelines and are not mandated. There is no penalty for non-adherence. This leads to lesser efforts towards compliance.
- Most guidelines are made applicable only for government entities and not all establishments. However needs of PwDs in their day-to-day lives span beyond services and products offered by government entities.
- Financial mechanisms that would help products benefiting PwDs to mature and survive in the market either do not exist or are very low and ineffective.
- Mechanisms of communicating to each of the relevant entities, monitoring adherence to the policies, notifying the specific actions to be taken and auditing are insufficient.

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

- All the provisions in the policies concerning access to PwDs must be made applicable for "all establishments" (including government, private, autonomous, non-government, etc.) and not just government entities. The same should be communicated explicitly in opening statements itself: This is in line with Rights of Persons with Disabilities Act 2016.

- All the specified provisions must be made “mandatory” and legally binding instead of mere guidelines. Moreover, clauses specifying substantial penalties for non-adherence should be incorporated.

Consider the example of several international organizations which had initially begun working in the interest of PwDs for the sake of compliance mandates, but upon realizing the business benefits gradually ended up integrating these efforts into mainstream business.

- To avoid ambiguity, the definition of “everyday use products” must be clearly defined and detailed. It should include products used for personal use, at home, office, public infrastructures, malls, etc as elaborated in Q6. There is a possibility of misinterpretation or using it as a loophole to justify non-compliance.
- TRAI should have a helpline where only complaints regarding accessibility can be received. The complaints should be published on the Internet along with corresponding actions taken. This would not just encourage disabled persons highlight their problems, but also would ensure that the manufacturers remain on guard to not get caught in the wrong foot.
- Onsettop boxes, service portability can be effectively used to shift operators who do not provide accessible services.

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?

- The suggested measures are only for consideration of TSPs. These provisions need to be mandated to ensure adoption. Earlier measures have been guidelines and there has not been much of action by TSPs. Further, A PWD consumer who is paying for these services must get associated information in accessible formats.
- The entire product lifecycle must be made accessible by keeping following points in per-view:
 - The staff of the TSPs as well as associated dealers must be fully aware about accessibility features of the products through regular trainings on accessibility
 - Accessibility features of the products must be clearly mentioned in the product catalogs of TSPs
 - The user manuals should be published on their online portals as well as shipped within the product packaging. All the contents should be accessible with assistive technologies used by the blind like screen reading software.
 - The TSPs must have a specific accessibility service contract in place with the PwDs in line with international practices i.e. those followed by AT&T etc
 - TSPs must setup a specific helpline to address the requirements of PwDs. Examples of companies already doing it in other countries include Apple, Samsung, Microsoft and Google
- A team must be setup to communicate measures, monitor adherence, establish reporting mechanisms, and notify entities highlighting gaps and audits to increase compliance. Most organizations are unaware of their responsibilities and its implications on the lives of PwDs.

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

- Collaboration is needed for integrating accessibility in all products that have a display screen and interactive touch screen. This includes set top box, POS machines, scanners, everyday use products such as washing machines, microwave, Air Conditioners, refrigerator, all types of vending machines, self-service public devices used in shopping malls, airports, railway ticketing, printers including 3D printers, scanners, lifts, elevators, musical instruments such as keyboard, rhythm pads, etc.
- Collaboration on integrating accessibility and setting standards for platforms, operating systems and software for wearable devices, Internet of Things and artificial intelligence based platforms / products.
- Collaboration on imparting necessary training and awareness regarding accessibility standards to manufacturers, professionals working in relevant fields and students studying in engineering fields. If all stake holders are educated about the use case for accessibility, it would become a part of the design instead of an afterthought for compliance.
- Collaboration for implementing accessibility in platforms like operating systems at a lower level as well as promoting the development of common assistive technologies that can work with myriad of devices can significantly reduce the cost and effort for all the stake holders. For instance, "Talk Back" a built-in screen reading software provided by Google Inc. allows a blind user to not just access apps from Google but any other android app with equal ease.
- Hardware devices can be made accessible by either factoring accessibility to the product or exposing the controls to an accessible device like accessible mobiles. The latter can be an alternative approach in making even devices with low computation capabilities accessible. For this proper standards and security should be in place.

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 response.

- Yes, A PWD consumer is paying the same amount for the services provided by these providers as any other consumer, and therefore must have equal access to all the pertinent information for the services he has availed.
- Every consumer regardless of disability must have an opportunity to choose from the available options which can only become possible if the mentioned information is provided in accessible formats.
- For instance, The service contracts though available in electronic formats are not prepared while keeping accessibility in mind and hence are inaccessible to screen reading software.

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

- Yes, in fact currently there is not a single service provider that enables a visually impaired person to access a basic facility like watching television independently.
- Therefore, there is an urgent need for producing accessible broadcasting devices i.e. Television, Set top boxes and more because even though the content is produced while keeping accessibility in focus it doesn't reach the targeted audience.
- Citing a recent example, Most of the visually impaired persons couldn't experience the audio described telecast of Dangal movie because they didn't have accessible Set top boxes and the audio description service was not uniformly available with all the service providers.

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.

- Yes, it will enable standardization and help in achieving economies of scale.
- Mandating this policy is the most important measure to ensuring adoption and compliance.
- Provisions can be made for providing first preference during procurement to products and services from organizations complying with international accessibility standards.
- Organize awareness campaigns and corporate round table conferences on the topic of accessibility.
- Encourage hiring of PwDs who would act as key influencers for adoption of accessibility standards in the organization.

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

- Enroll a team of beta testers representing different disability groups to ensure that the technologies and equipments are accessible and usable to all regardless of disabilities.
- The feedback obtained must be acted upon before the equipments are brought to market.
- Make accessibility education a part of curriculum for courses in relevant domains like engineering, design, management, medical as well as internal training for their staff

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.

- Mandating adoption of universal design for all platforms, operating systems and products is a better approach considering cost and other functional benefits.
- However wherever not feasible it is critical to mandate organizations to allow external applications as many organizations often do not allow proven technology to be integrated into their products.
- This has led to inaccessible products and exclusion of PWD's access to such equipment like in the case of set top boxes.

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?

- Adopting a blend of international standards for emergency services can go a long way towards making them reach PWD users.
- For instance, IVR enabled calling service can specifically prove beneficial for visually impaired.
- The accessibility of emergency services is critical and hence the guidelines should be legally enforceable for TSPs

Q13. Should the device/handset manufacturer be mandated to manufacture atleast 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.

Mandatory incorporation of accessibility standards in all the products is a better approach. Designing products exclusively for PwDs like mobile handsets would not just require more cost and effort but would also bring up the challenge of keeping them up-to-date with the other main stream products available in the market.

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.

- Initiate interventions to reduce cost of all everyday use accessible products and assistive tech products.
- Provide financial support through subsidies, tax exemption, zero import duty, tax holiday, 100% foreign investment, etc. To encourage organizations design, manufacture and sell accessible products.
- Disability and poverty goes hand in hand, and earning capacity of PwDs cannot increase without an access to equal and accessible environment.
- At the same time, it has been challenging for manufacturers and sellers of accessible products to sustain their business due to low demand and locating potential customers.
- This deadlock can be defused by interventions to reduce cost of products and making it more affordable for PwDs through following measures:
 1. Deliver subsidies to PwDs directly with a provision for them to avail it for products relevant for their needs. This will encourage them reach out to sellers as per their needs and create demand. More importantly, it will create a culture of buying among PWD that currently is lacking.
 2. Provide subsidies and tax benefits for sellers and manufacturers based upon the revenue and no of units manufactured and sold. Most startups working for PWD are unable to sustain. This will help them survive and encourage new startups address their needs.

3. Open up to 100% FDI and eliminate all foreign investment restrictions for funding on research, manufacturing and delivery of accessible everyday use products and assistive tech products. This is a highly underserved market. International expertise and resources will enable addressing the needs of a fast growing market.
4. Encourage import of assistive tech products that are not available in India through zero import duty and subsidy. There is very low local expertise and awareness of business potential. This will avoid duplication of investment on research and create awareness among local players to speed up the process of making and selling in India.
 - All procurement should prioritize on accessible products. Consider other products only in case of non-availability of accessible products with a mandatory clause on making them accessible in predefined timelines.
 - Similar to international trade fairs, there should be an annual international trade fair of assistive technology of true international standards. This should be a big awareness for local manufacturers and sellers to showcase their products to international audience.

Q14. How should companies be encouraged to utilize 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?

- They can be used for collaboration projects applicable for products relevant for their industry elaborated in Q6.

The industry expertise and relevant infrastructures will enable companies to foster integration of accessibility features into their own products leading to direct business and social benefits.

Moreover, the focus should be on building demands for solutions with accessibility features by empowering PwDs rather than CSR to create a win-win situation for companies as well as PwDs.

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?

- SMS / email alert service for new product / scheme launches can help the campaigns reach wider audience.
- Collaboration with various organizations working in the interest of PwDs can also help spread awareness to a larger audience.
- Conduct workshops and seminars for demonstration of accessibility tools.

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.

Yes. This should be applicable for all products that can be made usable for PWD including the ones mentioned above for the reasons mentioned in Q 15.

Regards,

Team Blind Graduates Forum of India

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