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**New Delhi-110002**

Dear Sir,

**Re: Response to the Consultation Paper on “Making ICT accessible to persons with Disabilities”.**

The Telecom Regulatory Authority of India (TRAI) has circulated a Consultation Paper dated 20<sup>th</sup> December 2017 (said Consultation Paper) relating to “Making ICT accessible to Persons with Disabilities”. The said Consultation Paper has been circulated for identifying the key policy areas where intervention is needed to understand the barriers being faced by Persons with Disabilities (PwDs) in accessing the broadcasting and telecommunication services in order that affirmative action may be taken at the policy level to formulate an advisory or regulate the equipment and/or service providers.

The TRAI has suo-moto initiated the said Consultation Paper. It further stated that such inputs are to be decided by holding preliminary discussions with various stakeholders.

1. In the said Consultation Paper the TRAI noted that the broadcasting and telecommunication services have become ubiquitous in the last two decades. These services reached out to the most remote areas of the world, thereby empowering millions of people. Information and Communication Technology (ICT) is revolutionizing inter alia, the spheres of education, health care, environment, agriculture etc. Therefore an equal and inclusive society requires providing equal opportunity to all sections of the people regardless of their physical, social, religious and economic identity in all spheres of life such as education, economic and skill development. This step is necessary for the growth of the country and empowerment of its entire

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people. However it has been noticed that the PwD's are unable to access Broadcasting and ICT services due to lack of necessary accessibility features, unaffordable prices of equipment or unavailability of required services to make it compatible for use by such persons. Hence it was important that the aforesaid hindrances be removed so that the advancements made in the Broadcasting and ICT benefits can be used by all segments of society.

2. In response to the said Consultation Paper, the News Broadcasters Association (NBA) states that it is representing the views of member news broadcasters. NBA also states that in its response it is treating the Broadcasting sector and ICT/Telecom sectors as two different sectors because the content related issues, expertise required, jurisdictions, regulations, objectives/goals and operations of these sectors are clearly different and cannot be merged.

1. In view of above, the issues for the consultation raised are:

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

Citing the last of Census 2011 TRAI has stated that India has about 26.8 million people with disabilities.

In the said Consultation Paper at paragraph 2.3 the disabilities mentioned are a) audio impairment, b) visual impairment c) dexterity based disability and d) cognitive disability which by and large includes most of the disabilities, with specific accessibility challenges.

The other disabilities which may be considered are given in the "*Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995*" and "*National Trust for welfare of Person with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999*", such as autism, cerebral palsy, mental retardation and related illness, low vision and loco-motor disabilities including muscular dystrophy. However it may be a greater challenge for the Broadcasting and ICT benefits to be made accessible to some of the disabilities mentioned above. Further it may be noted that the extent of every disability would need to be carefully examined to measure the degree to which the said impairment is interfering with the PwD's accessibility to Broadcasting and ICT benefits and therefore NBA

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states that while implementing or drafting a legislation /policies disabilities must be categorized based on severity in relation to the accessibility issues. There cannot be a universal or general category of PwD's in relation to the above issue.

NBA also submits that broadcasting content, inherently as a medium is accessible to most PwD's as it involves visuals and sound for the visually impaired, while hearing impaired could understand the content, if they are trained in reading lip-sync content.

In this context, NBA states that the Ministry for Information and Broadcasting (MIB) has already constituted a sub-group, which is in the process of framing Accessibility Standards for Television Channels. Hence, the TRAI should consider deferring its current consultation process till the sub-group concludes framing the standards.

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

NBA states that the PwDs need to be categorized based on the severity of their disabilities in order that a practical solution to accessibility in respect of Broadcasting and ICT sector is found. Usually a universal categorization is an impediment in finding a solution to the problem of accessibility. The other challenges that PwDs face while accessing Broadcasting and ICT services includes lack of distribution equipment and consumer premise equipment, including remote control systems that have voice recognition, and touch-screen.

**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?**

The reasons that the desired benefits of Broadcasting and ICT not reaching the PwD's could be the economics of their situation, cost of equipment, lack of awareness and education amongst them. If in society, disability is combined with the economic circumstances then accessibility in relation to Broadcasting and ICT can become a major problem. Many people with hearing impairment are not able to purchase and maintain the hearing machine, due to the expense factor.





NBA states that Broadcasting/Telecommunication services per se are an integration of several products and services and the stakeholders involved in this chain have to work in coordination to deliver optimum and quality service to customers who use them. Though desirable, the effort required to come together to make Broadcasting and ICT accessible to PwDs is a major and expensive exercise.

NBA submits that for bringing Broadcasting and ICT benefits to the PwDs in an efficient manner, the government must factor in the cost, expense and thereby the business impact for the stakeholders/broadcasters, especially the smaller stakeholders, as they may not be in a position to modify the equipments, software, etc., to facilitate such services as it would affect their business as well as revenue models.

The issues above need to be addressed before the service providers are mandated to accommodate Broadcasting and ICT services for PwDs.

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

In respect of the above question, NBA states that TRAI should look at a wider consultation on these issues once the MIB sub- group formulates its standards.

2. Once the MIB formulates its standards, and includes distributors and equipment makers in its strategy, only after that to enable better access to Broadcasting and Telecommunication services and devices to PwDs the following measures may be considered:

(1) the cost of equipment/s needs to be substantially cheaper.

(2) Audio assisted services / button assisted services may be given for telecom devices to PwDs.

(3) Benefits, tax and other subsidies for the stakeholders who implement these measures.

(4) The choice to implement the above measures must be voluntary particularly as the news broadcasters are currently facing several stringent regulations, legislations and challenges. It may be noted that the environment/ conditions in which the news broadcasters are operating is

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extremely onerous and strenuous. Infrastructure costs are high whereas there continues to be lack of inflow of revenue. Any major modifications or additional investments that may be required to implement the above modifications for enabling Broadcasting and ICT services to be accessible to PwDs will have a huge economic impact on the business model of news broadcasters.

NBA submits that as in any business, unless there is economic value/ profits for all the stakeholders in the value chain, any measure that increases costs and curtails economic freedom will not be sustainable in the long term. If the government doesn't support the Broadcasting industry economically and otherwise, in relation to the issues raised in the said Consultation Paper, the broadcasters will not be able to implement these measures for PwDs.

**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?**

At the outset NBA submits that the Internet Service Providers (ISP) and Telecom Equipment Manufacturers (TEM) are better equipped to answer the aforesaid question. The broadcast media by the very nature and virtue of its medium is aligned to the ITU principles of a) Availability b) Accessibility and c) Affordability.

However it may be noted that in case of telecom, the equipment compatibility serves the purpose for accessing the telecom services to PwDs but in case of Broadcasting services, the equipment in terms of television sets and Set Top Boxes (STB) could be made compliant subject to the submissions made above. For this, Bureau of Indian Standards (BIS) should set the standards which will be made an acceptable standard for future manufacturing.

The bigger challenge in case of Broadcasting sector is the content. For the content to be made accessible to the PwDs, it involves huge effort, enterprise and costs. It should also be kept in mind that the programming envisaged for the PwDs does not cause disturbance, disruption or any inconvenience for other viewers.

Another challenge / difficulty faced in accessibility issues are of the readiness of content distributors such as Multi-System Operators (MSOs) / Local Cable Operators (LCOs), as well as availability of equipment at the





distribution front such as head-ends that allow accessibility and devices at consumer end, such as set-top-boxes and remote controls.

Furthermore it will be an onerous task if an endeavor is made to make all the 900 television channels accessible to the PwD's .

NBA suggests that perhaps the public broadcaster could start the process of making Broadcasting benefits available to the PwD's

However, it is reiterated that the attempt at accessibility must be voluntary and backed by benefits and subsidies that will encourage the news broadcasters and other stakeholders to attempt to provide accessibility to the PwD's.

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

NBA suggests that the areas where collaboration between various stakeholders would be useful are if:

(a) hardware and software developers should come together in developing cost effective and practical technologies .

(b) distribution platforms, equipment vendors and device manufacturers need to collaborate.

(c) Integration should be encouraged at every interface level which is important and necessary. In fact a research and evaluation team must continuously evaluate the efficiency of such measures and work with organizations/institutions and groups who support and work with PwDs. This is critical for the success of making accessibility to the PwD's possible.

Since the broadcasters' face potential challenges in enabling accessible content with regard to third- party procured/ commissioned content both from domestic and foreign providers, as well as library / archived content, which would increase the operational costs for the broadcasters, there should be a centralized funding, to help fund the costs for both broadcasters, distribution platforms, equipment and devices makers, and content producers. This would be apart from the government supporting the broadcasting sector initially from the Universal Service Obligation Fund (USO) fund.





Education and awareness amongst all stakeholders and a clear understanding of the economic model of each stakeholder will play a key role in creating means for better

**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.**

Subject to the submissions made above, NBA states that information pertaining to billing, usage, pricing and contracts in the form accessible to PwDs should be provided. However, broadcasting is a business-to-business engagement for television companies and the billing is done by the distribution platforms such as direct- to-home providers, and local cable operators. Therefore, distribution platforms should be mandated to provide information pertaining to billing, usage, pricing and contracts in a form that is accessible by PwDs.

NBA suggests that instead of the mandating the above directions, there should be a dedicated Unit within the regulatory bodies to address the concerns of the PwDs effectively and on priority.

**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?**

NBA states that in the present digitized environment, existing setup, the legislations and regulatory measures that govern the Broadcasting sector, it would not be advisable to mandate that the devices used for watching television provided through cable, satellite/DTH, fibre, etc. be made accessible to PwDs without certain caveats. The attempt to mandate the above can only come about after categorizing the disabilities based on degree of impairment. Subsequently upon an analysis of this categorization, measures/solutions may be found by way of product design as well as policy design, to make the broadcasting benefits available to the PwD's since any solutions designed towards the same would depend upon specifically identifying the challenges faced by the PwD's and the extent to which it is possible to minimize those challenges by design solutions.

Also for future manufacturing, BIS may come out with the standards of equipment to be maintained.





NBA also states that while it is commendable that the government/ TRAI are working towards creating standards that would spur innovation for devices, rather than mandating any rules, TRAI should await making any recommendations until the MIB sub-group formulates the standards .

**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.**

NBA submits that India cannot blindly adopt and implement the international accessibility standards as policies have to be adopted and implemented in accordance with the socio-economic development/environment of a country. In view of the diverse nature of the country, consumers and the broadcasting industry, merely replicating the strategies and policies of the different countries would not provide a workable solution and may in fact result in non-efficient use of resources. As stated earlier, certain issues are peculiar to India alone like the issue of multi-culturalism, multi-lingualism and economics which are issues of concern when it comes to making Broadcasting and ICT benefits accessible for PwDs. It may be a huge challenge to make all 900 TV channels available/ accessible to PwDs. A more practical approach should be adopted in order that effort being made in the direction of making Broadcasting and ICT accessible to PwDs can achieve the desired results.

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

NBA submits that subject to the submissions made above , bluetooth technology, motion commands, voice assistance are some of the technologies which can be deployed by service providers or equipment manufactures to assist PwDs.

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

NBA states that directing the device manufacturers to allow in their device's operating system those applications which are meant to assist PwDs is a workable option, however BIS should set the standards .





**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?**

It is stated that measures/services such as SMS (text & voice) based aid should be available for PwD's. Every emergency service like Police, Fire, and Hospitals should have a Special Unit with a capability to receive such messages in situations where PwDs need help in emergencies. However the term "Emergency Services" needs to be carefully and clearly defined.

**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?**

**No Comments**

**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?**

Though the above question is better answered by TEM's and ISP's , however NBA suggests that a separate funding consisting of the CSR contributions made by the companies in this field should be created for application, devices and services to be provided to PwDs. However, it should be left to the companies to decide on how to spend their CSR funds.

The aforementioned fund should promote research and development in this field and meet the expenses towards the special technologies required for making Broadcasting and ICT services accessible to PwDs.

**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.**

This question is better answered by TEM's and ISP's, however initially as suggested above, the government should fund this project for the development of applications, devices and services meant for the PwDs from the USO Fund.

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A central funding mechanism should also be established by the government from MIB, Department of Empowerment of Persons with Disabilities under Ministry for Social Justice and Empowerment, as well as CSIR, and Ministry of Science and Technology as it will help fund the increase in operational costs of the news broadcasting industry when attempts are made to make available news content to the PwD's.

**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?**

NBA reiterates the fact that the government through its agencies should run campaigns across the country designed to create awareness about use of Broadcasting and ICT accessibility tools.

However campaigns designed to create awareness about use of Broadcasting and ICT accessibility tools must first focus on different levels of ability determined by categorization of degree of impairedness and not by a universal definition of disability.

Once the categorization is complete and the infrastructure has come up, effective campaigning can be done by involving the Government Departments at Union level, State levels, and at local / Panchayat levels. The Non Government Organisations (NGOs) can also conduct effective campaigns to make the PwDs aware about such tools.. Grassroot level awareness is a necessity just as schools and colleges must have curriculum that educates students to be aware of challenges faced by PwDs.

**Q17. Should the Government incentivise 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.**

NBA submits that the Broadcasting and Telecom sectors are already subject to competitive market forces not only at national level but also at international level. Hence in order to manufacture and develop ICT tools and devices viz. tools for mobile accessibility, TV accessibility or for web accessibility for PwDs, the special technologies and special incentives that are required can only be developed and manufactured if the Government considers providing tax breaks and other incentives to these sectors.





As stated above a central funding mechanism should also be established by the government from MIB, Department of Empowerment of Persons with Disabilities under Ministry for Social Justice and Empowerment, as well as CSIR, and Ministry of Science and Technology as it will help fund the increase in operational costs of the news broadcasting industry when attempts are made to make available news content to the PwD's.

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

The need for making Broadcasting and ICT benefits accessible to PwDs cannot be underemphasized. Having said that, it is important to note that there are various critical differences between the developed countries where such accessibility is provided and the Indian socio-economic conditions. Any attempt to replicate the foreign model in India in terms of policies, guidelines and implementation may not give the desired results. For example – even the hearing machine, which is a basic requirement for a person with hearing impairment is not accessible to most of the persons in India because of the expense and the cost of maintenance. In India the fact is that the economics in case of PwDs is a bigger challenge since the employment opportunities are less. If any technology is to be introduced in any of the relevant sectors it should be done holistically in order that the maximum numbers of PwDs are able to avail of the Broadcasting and ICT services.

NBA submits that content related issues should continue to be regulated by the MIB, who should continue to act as the policy maker, licensor, and content regulator under the CTN Act 1996 and CTN Rules 1994. TRAI should continue to be regulate Tariff, Interconnection and QOs for broadcasting and cable services as mandated in the TRAI Act 1997. The two jurisdictions cannot be merged.

NBA reiterates that TRAI must revisit the consultation or defer the current process until MIB Sub- Group completes framing Accessibility Standards for Television Channels.

*Annie Joseph*  
14/2/18

Annie Joseph  
Secretary General