



Banking and Accessibility in India:  
A Study on Banking Accessibility in India

**by**  
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## 1. Executive Summary

India is a signatory to the United Nations Convention on the Rights of Peoples with Disability, and has an obligation to provide equal opportunities and facilities to everyone, irrespective of any disabilities they might suffer from. This is guaranteed in the right to equality and the right to life, which are enshrined in the Fundamental Rights in the Constitution of India. There are also specific Reserve Bank of India notifications that mandate banks offer banking facilities in a non-discriminatory manner to all customers. However, there are still many problems faced by people with disabilities when accessing banking and financial services in India. Many banks and ATMs aren't physically accessible, the staff has no training or expertise in dealing with customers who have special needs, and despite the existence of the technology, ATMs are not equipped to be used by people with disabilities.

There are several guidelines which are in place internationally which can be referred to when formulating policy on banking and accessibility in India. These include guidelines on ATM construction and modification (USA) and guidelines on making websites accessible for people with disabilities (the Web Content Accessibility Guidelines), as well as voluntary standards that have been taken up by Banking Associations in countries like Australia and New Zealand in order to making banking more accessible to people with disabilities and the older population.

Currently the adoption of accessible features and technologies in banks in India is very low, despite there being a legislative as well as executive push for the same. Banks which do not follow these guidelines are not meeting their legal requirements, and it is important for them to understand not just their obligations, but also the benefits that will accrue to them if they follow the suggested guidelines. To that end, this report looks at the current notifications and guidelines that govern this area, the problems faced by people with disabilities, and looks at guidelines from other countries to suggest solutions that can be incorporated by different banks in India.

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## 2. Introduction

As per the 2001 Census, there are around 2.19 crore disabled people in India. They constitute 2.13 per cent of the total population of the country.<sup>1</sup> This includes persons with visual, hearing, speech, locomotor and mental disabilities. (The 2011 census data on disability is only likely to be released in the first quarter on 2013).<sup>2</sup> Despite these numbers, there is a lack of understanding of their needs, and people with disabilities face a number of obstacles when it comes to living a normal life, and availing banking facilities is a big part of the problem. Consider the fact that only 50 out of the 1.04 lakh Automated Teller Machines (ATMs) in India are accessible to people with disabilities.<sup>3</sup> There is a general lack of infrastructure and awareness in India that permits people with disabilities to use banking services. This translates to problems not just in accessing a physical bank and seeking help from a bank official, but also extends to accessing services such as ATM machines and online banking options.

This problem is exacerbated by the fact that around 75 per cent of persons with disabilities live in rural areas, and only around 49 per cent of the disabled population is literate and only 34 per cent is employed.<sup>4</sup> In the metros, some disabled-friendly banking options might be available, but in the rural areas, there are no facilities and no sensitisation either.

India is a signatory to both the United Nations Convention on the Rights of Persons with Disabilities, 2006<sup>5</sup> (hereinafter, “UNCRPD”) and Biwako Millennium Framework towards an Inclusive, Barrier-free and Rights-based Society for PWDs in Asia and the Pacific, 2002<sup>6</sup> and thus has an international obligation to ensure equal access to all members of the population. This obligation extends to giving people with disabilities the right to conduct banking services. This has been recognised by several Reserve Bank of India (RBI) directives as well, though these guidelines have not been fully implemented so far.

Currently, it is very difficult for people with disabilities to use banking services in India. If a person who has a disability walks into a branch for a home loan, the branch does not have a person who can understand or interpret sign language. More usually, the branch does not even have the resources or knowledge on who to contact to facilitate the interaction by interpreting. These obstacles mean that a person with disability/ies always has to latch on to someone who is fully capable to help them. Without such help in the form of guarantors or co-borrowers who are fully capable, the chances of obtaining finance from the banks are low because bank's

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1. Data taken from <http://www.disabilityindia.com/html/facts.html>.
  2. Press Information Bureau of India press release, available at <http://www.pib.nic.in/newsite/erelease.aspx?relid=78740>. For the first time in India, people with multiple disability will be a part of Census 2011. The census will not only include the number of people in each disabled category but also recognize diseases like dyslexia and autism as forms of disability, and will help give a better idea when coming up with policies for people with disabilities. See generally: Surbhi Khyati, “Census 2011 to mark people with multiple disabilities”, available at <http://www.indianexpress.com/news/in-a-first-census-2011-to-mark-people-with-multiple-disability/714741/>.
  3. “NCR Corp to set up 50 Talking ATMs in Post Offices”, available at <http://llegal.com/2012/09/ncr-india/>.
  4. More data on disability can be seen at the World Bank Country Profile on Disability for India, available at [http://siteresources.worldbank.org/DISABILITY/Resources/Regions/South%20Asia/JICA\\_India.pdf](http://siteresources.worldbank.org/DISABILITY/Resources/Regions/South%20Asia/JICA_India.pdf).
  5. Full text available at <http://www.un.org/disabilities/default.asp?id=259>.
  6. Full text available at <http://www8.cao.go.jp/shougai/english/biwako/contents.html>.

probably give a person with disability/ies a much lower credit rating based on their own internal criteria. These determinations automatically put the disabled at a disadvantage. A person with learning disabilities, for example, dyslexia, will face severe difficulty filling out an application form (or any document for that matter) and banks are not disabled friendly in terms of the attitude of the staff towards such difficulties.

Making banking accessible for people with disabilities is both a best practice that should be followed, as well as a sound commercial decision. There are a large number of people in India with differing levels of disability, who would benefit from using banking services. Additionally, the number of people will only increase with time as India's young population grows old, since incidence of disability increases with age.<sup>7</sup> The Internet, above all, is a tool for people with disabilities to bridge the differences between them and others, and all efforts must be made to ensure that they are not at a disadvantage when it comes to using services such as net banking. There is also the consideration that improving accessibility improves access for all users, and makes it possible for them to make use of more services. A lot of accessibility issues (such as the physical accessibility to branches and ATMs, signature mismatches due to hand tremors or strokes) are common to the disabled, the elderly and neurological conditions. Taken together, this constitutes a significant percentage of the customer base — so these issues should be addressed by banks for that reason alone.

This report will look at the legal imperatives that govern accessibility in banking services in India, and look at the various problems being faced by people with disabilities when trying to use banks. It will also look at sample guidelines from other countries and suggest best practices for banking institutions, as well as taking a look at the various costs that could be incurred in trying to making their banks more accessible.

The scope of this report is restricted to cover only basic banking services in India, and other financial services, such as insurance and loans, have not been dealt with.

### **3. Legal Imperatives**

The rights of persons with disabilities have been recognised under various legal instruments, and it has been established that they are to be given the same services and privileges as other members of society.

#### **3.1 Constitutional Provisions**

Part III of the Constitution of India, which deals with the fundamental rights of citizens, recognizes the principle of equality of all people. Article 14 states that the government must accord equal protection of the law to any person within the territory of India.<sup>8</sup> This recognition of the importance of non-discrimination means that the State must ensure that people with disabilities do not suffer disadvantages when it comes to accessing public services.

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7. See generally: "Guidelines for Accessible and Usable Web Sites: Observing Users Who Work with Screen Readers", Mary Theofranos and Janice Redish, available at <http://redish.net/content/papers/interactions.html>, last viewed on July 26.

8. Article 14: Equality before law - The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India (Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth).

Article 15, which deals with prohibition of discrimination on various grounds states that no citizen is to be subject to any disability, liability or restriction with regard to access to shops, public restaurants, and other public places.<sup>9</sup>

It is evident that this important constitutional protection extends to people with disabilities, and it is their right to gain equal and accessible access to all manner of services, including banking.

### **3.2 Legislation dealing with Disability**

There are several national laws that deal with the rights of people with disabilities, though not all of these laws have a direct bearing with banking.

### **3.3 The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995**

The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (“the PWD Act”) was enacted to give effect to the proclamation on the full participation and equality of people with disabilities on both central and state governments. The PWD Act has been enacted under Article 253 of the Constitution.<sup>10</sup> It has several provisions for people with disabilities, including education, employment, creation of barrier free environment, social security and similar overlooked areas. It provides for a three tier arrangement:

For evolution of policy for the benefit of persons with disabilities and implementation of the provisions of the Act and laws, policies, etc. and monitoring implementation and redressing grievances

The implementation of the Act relies on collaboration between the appropriate governments, which includes various central ministries and departments, state and union territories, and local bodies.<sup>11</sup>

Chapter VIII of the Act deals with non-discrimination, and one of the measures it recommends is making buildings accessible by simple measures such as curb cuts and slopes in the pavements for wheelchair users.

There are several problems with the enactment.<sup>12</sup> The terms accessibility and disability are not clearly defined. They are also not provided as a matter of right but are based on the economic

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9. Article 15. Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth
    - (1) The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them
    - (2) No citizen shall, on grounds only of religion, race, caste, sex, place of birth or any of them, be subject to any disability, liability, restriction or condition with regard to
      - (a) access to shops, public restaurants, hotels and palaces of public entertainment; or
      - (b) the use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general public
  10. Article 253: Legislation for giving effect to international agreements - Notwithstanding anything in the foregoing provisions of this Chapter, Parliament has power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body.
  11. For more details on the legislation, along with the full text, refer to <http://socialjustice.nic.in/policiesacts3.php>.

capacity of the service provider. It also fails to consider the access to services and information. However, public banks need to be conscious, since they will usually be considered to have sufficient economic capacity, and might be bound to deliver their services to people with disabilities. This has often become an issue in other jurisdictions as well. In 2009, the Royal Bank of Scotland, for example, was forced to pay extensive damages to a disabled student who was unable to access the bank due to a lack of wheelchair lifts.<sup>13</sup>

### **3.4 The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999**

The trust is intended to give complete care to people with mental retardation and cerebral palsy, and also manage the properties bequeathed to the trust. The trust supports programmes that promotes independence and address the concerns of these special persons, especially the ones who do not have family support. The trust is also empowered to receive grants, donations, benefactions, requests and transfers.<sup>14</sup>

### **3.5 The Mental Health Act, 1987**

The Act consolidates and amends the law relating to the treatment and care of mentally ill persons, in order to make better provision with respect to their property and affairs, and other incidental matters.<sup>15</sup>

### **3.6 The Rehabilitation Council of India Act, 1992**

The Act was created to provide for the constitution of the Rehabilitation Council of India for regulating training of the rehabilitation professionals and maintaining of a central rehabilitation register. It also regulates the recognized rehabilitation qualifications, and prescribes minimum standards of education.<sup>16</sup>

### **3.7 RBI Notifications**

The most important resource when it comes to banking guidelines is the RBI, which comes out with regular notifications. The RBI has been conferred wide powers under the Banking Regulation Act, 1949 (BRA),<sup>17</sup> under which it can supervise and control the various banking companies, and they are bound to follow its directions. Section 35A of the Act specifies that in public interest or in the interest of banking policy, the RBI can issue such directions as it deems fit, and the banking companies or the banking company, as the case may be, shall be bound to comply with such directions.<sup>18</sup>

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12. See generally: [www.accessability.co.in/access/files/Accessibility-in-India-Issues-Status-Way-Forward.pps](http://www.accessability.co.in/access/files/Accessibility-in-India-Issues-Status-Way-Forward.pps).
  13. "Bank loses accessibility case", available at <http://www.fm-world.co.uk/news/fm-industry-news/bank-loses-accessibility-case/>.
  14. Singh, A. & Nizamie, S.H. (2004) Disability: the concept and related Indian legislations. *Mental Health Reviews*, accessed from [http://www.psyplexus.com/mhr/disability\\_india.html](http://www.psyplexus.com/mhr/disability_india.html) on September 11, 2012.
  15. Id.
  16. Id.
  17. Full text of the legislation is available at The Banking Regulation Act, 1949, <http://indiankanoon.org/doc/1129081/>.
  18. Section 35A: Power of the Reserve Bank to give directions-
- (1) Where the Reserve Bank is satisfied that-

RBI has released several notifications dealing with the rights of the disabled.

### **3.8 Circular on grant of banking facilities to the visually challenged**

In its Circular DBOD. No. Leg BC. 91 /09.07.005/2007-08 dated June 4, 2008,<sup>19</sup> the RBI mandated that banking facilities (including cheque book facility, operation of ATM, locker, etc.) cannot be denied to the visually challenged as they are legally competent to contract.

In the notification, the RBI recalled the order of the Chief Commissioner for Persons with Disabilities, which had earlier been passed by the Indian Banks' Association ("IBA") to its member banks. The Order instructed that banks should offer all the banking facilities including cheque book facility, ATM facility and locker facility to the visually challenged and also assist them in withdrawal of cash. This order has reiterated that there can be no denial of services just because there is an apprehension of risk in operating or using the facility; it said that a similar security threat exists for all members of the population.

As per the RBI notification, the banks are therefore bound to:

Ensure that all the banking facilities such as cheque books are offered to the visually impaired without any discrimination. These facilities should include third party cheques, ATM, net banking, locker, retail loan and credit card facilities.

Advise their branches to render all possible assistance to the visually impaired for availing the various banking facilities.

#### **3.8.1 Circular on making ATMs accessible**

The RBI had been receiving several suggestions to make branches and ATMs easily accessible to people with disabilities by providing ramps so that wheel chair users can access them and the height of the machine is also appropriate for them. It had also been receiving suggestions for installing speaking software and key pads with letters in Braille to facilitate use by persons with visual impairment. After considering these suggestions, the RBI passed a notification, directing the banks to implement such measures.

As per its Circular DBOD. No. Leg BC. 91 /09.07.005/2007-08 dated June 4, 2008,<sup>20</sup> RBI has directed all banks to:

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- (a) in the public interest; or
  - (aa) in the interest of banking policy; or
  - (b) to prevent the affairs of any banking company being conducted in a manner detrimental to the interests of the depositors or in a manner prejudicial to the interests of the banking company; or
  - (c) to secure the proper management of any banking company generally; it is necessary to issue directions to banking companies generally or to any banking company in particular, it may, from time to time, issue such directions as it deems fit, and the banking companies or the banking company, as the case may be, shall be bound to comply with such directions.
- (2) The Reserve Bank may, on representation made to it or on its own motion, modify or cancel any direction issued under sub-section (1), and in so modifying or cancelling any direction may impose such conditions as it thinks fit, subject to which the modification or cancellation shall have effect.

19. Available at <http://rbi.org.in/scripts/NotificationUser.aspx?Id=4226&Mode=0>.

20. Available at <http://rbi.org.in/scripts/NotificationUser.aspx?Id=4923&Mode=0>.

- Provide ramps to ATMs: Banks have to take necessary steps to provide all existing ATMs or future ATMs with ramps so that wheelchair users or persons with disabilities can easily access them and also make arrangements in such a way that the height of the ATM does not create an impediment in its use by a wheelchair user.
- Ramps at bank entrances: Banks may also take appropriate steps including providing ramps at the entrance of the bank branches so that the persons with disabilities or wheelchair users can enter the bank branches and conduct business without much difficulty.
- Accessible ATMs: Banks should make at least one third of new ATMs installed as talking ATMs with Braille keypads and place them strategically in consultation with other banks to ensure that at least one talking ATM with Braille keypad is generally available in each locality for catering to needs of visually impaired persons.
- Information about the ATMs: Banks should also bring the locations of such talking ATMs to the notice of their disabled customers.

### 3.8.2 Circular on implementation of the guidelines

These guidelines were strongly reiterated as recently as September 5, 2012, where the RBI by its notification numbered DBOD.No. Leg.BC. 38/09.07.005/2012-13<sup>21</sup> highlighted the abovementioned circulars. It said that it had been brought to their notice by the Office of the Chief Commissioner for Persons with Disabilities that visually challenged persons are facing problems in availing banking facilities like internet banking.

Banks were advised under this notification to strictly adhere to instructions contained in the above circulars and extend all banking facilities to persons with blindness, low-vision and other disabilities.

### 3.8.3 Circular on guardianship certificates

The RBI, by its Master Circular DBOD.No.Leg.BC.9/ 09.07.006/ 2009-10<sup>22</sup> dated July 1, 2009 on Customer Service, directed banks to accept guardianship certificates issued by local level committees set up under the National Trust Act, enabling persons with disabilities like autism and cerebral palsy to open and operate accounts. Banks were advised to rely on the guardianship certificate issued either by the district court under the Mental Health Act or by the local level committees under the National Trust Act for the purposes of opening and operating bank accounts<sup>23</sup> by the legal guardians for people with disabilities that is covered under the Act. Banks were also advised to ensure that their branches give proper guidance so that the parents or relatives of the person with disability/ies do not face any difficulties in this regard. It has also directed that information about the opening of such bank accounts be displayed conspicuously, in both English as well as the regional language, in its circular RBI /2009-10/142.<sup>24</sup> (This notification was in response to a Delhi High Court decision that directed banks to put up such information).

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21. Available at [http://www.rbi.org.in/scripts/BS\\_CircularIndexDisplay.aspx?Id=7548](http://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=7548)

22. Available at [http://rbi.org.in/scripts/BS\\_CircularIndexDisplay.aspx?Id=5071](http://rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=5071).

23. "Banking Made Easier for People with Disabilities", available at [http://www.autism-india.org/india\\_legal.html](http://www.autism-india.org/india_legal.html).

24. Available at <http://rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=5248>.

Banks are therefore directed to:

- Accept guardianship certificates: Banks can accept certificates issued by local level committees set up under the National Trust Act or district court under the Mental Health Act, so that persons with disabilities like autism and cerebral palsy can open and operate accounts.
- Give assistance: Banks should ensure that their branches give proper guidance so that the parents or relatives of the person with disability/ies do not face any difficulties.
- Display information: Banks should ensure that information about the opening of such bank accounts be displayed conspicuously, in both English as well as the regional language.

### 3.9 National Policy on Disability

The National Policy for Persons with Disability, which was published in 2006, recognizes the extent of problems faced by PWD in India. The report also discusses the number of citizens who are affected by disability: “According to the Census 2001, there are 2.19 crore persons with disabilities in India who constitute 2.13 percent of the total population. This includes persons with visual, hearing, speech, locomotor and mental disabilities. Seventy five per cent of persons with disabilities live in rural areas, 49 per cent of disabled population is literate and only 34 per cent are employed. The earlier emphasis on medical rehabilitation has now been replaced by an emphasis on social rehabilitation. There has been an increasing recognition of the abilities of persons with disabilities and emphasis on mainstreaming them in the society based on their capabilities.”<sup>25</sup> The policy endorses accessibility and says that a barrier-free environment enables people with disabilities to move about safely and freely, and use the facilities within the built environment. In the principle areas of intervention identified by the policy, it ensures that banking services are made barrier free and accessible.<sup>26</sup>

The National Policy is intended to inform the disability plan to be incorporated in the 11<sup>th</sup> Five Year plan,<sup>27</sup> which will have a timeline and funds for programmes which can be allotted through the Finance Commission.

## 4. Explaining Disabilities

There are many problems faced by people with disabilities when they consider banking and financial services. From the very beginning, banks are a complicated route to charter for people with disabilities. Banks often resort to complex schemes and pricing systems, which can be difficult to understand for people with cognitive disabilities.<sup>28</sup> Finding bank branches and ATMs in their neighbourhood which are disabled-friendly and can be accessible to them is another

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25. National Policy for Persons with Disability, available at <http://www.socialjustice.nic.in/nppde.php?format=print>.

26. Principle Areas of Intervention VI (x): “Banking system will be encouraged to meet the needs to the persons with disabilities”, *Id.*

27. See generally: Discussion on disability in the Mid Term Appraisal of the Eleventh Five Year Plan, Page 185, available at [http://planningcommission.nic.in/plans/mta/11th\\_mta/chapterwise/Comp\\_mta11th.pdf](http://planningcommission.nic.in/plans/mta/11th_mta/chapterwise/Comp_mta11th.pdf).

28. Tim Noonan, “Acceptable E-commerce in Australia: A Discussion Paper about the Effects of Electronic Commerce Developments on People With Disabilities”, available at <http://www.timnoonan.com.au/ecrep10.htm>

difficulty, especially in a place like India where finding information is often a problem. There might be problems with physical accessibility — lack of ramp which makes it impossible for a wheelchair-bound person to use a bank or uncomfortable height of an ATM which makes it unwieldy for a wheelchair-bound person to access it — which can extend to the virtual realm as well: if a bank's website is not complying with the standards for web-accessibility (discussed below) and is difficult to use by people with disabilities, they will be unable to take recourse to internet banking, as well.

In many countries such as Australia<sup>29</sup> there is great reliance on phone banking, which can be especially helpful to blind customers, or on audio-based telephone devices, which can be used by deaf-blind or the deaf customers. However, neither technology is at present available in India; text-based alternatives or spoken prompts (TTY based telephone banking) are not used by any banks. It is therefore essential that if a customer is using the interactive voice response (“IVR”) system of a bank and speaking to a bank representative on the phone to get a transaction done that the communication be clear, precise and easy to follow — as anyone who has attempted phone banking in India would testify, that is certainly not the case.

Let us take a look at some specific disabilities and what banks can do to ensure accessibility to their customers:

#### **4.1 Problems faced by the hearing impaired while banking**

When a person who cannot hear goes to a bank, the first problem they face is the fact that unless they are proficient at lip reading, they will find it difficult to communicate with the bank officials or tellers even when undertaking simple tasks like withdrawing money or depositing cheques. An important point to remember is that most hearing impaired people are more familiar with sign language than with English, and so can get confused by the complicated language used by the banks in their brochures and information booklets. If a deaf customer is communicating with the bank official by writing out their instructions, it could take a longer time than other customers and they might face problems with other customers.

Another problem that might occur is that error messages or other audio cues might not be picked up by customers who are using multimedia based banking services or ATM machines.<sup>30</sup> This problem is exacerbated when using customer care services for banks, which are usually available only on the phone. With a lack of technological options for the hearing impaired, they are unable to access the IVR systems, or customer care executives, which make it difficult to avail all the banking service facilities.

What can banks do?

- Training: Ensure that the bank staff is sensitised to the needs of the disabled and deaf customers, and know of a sign language translator who can be called if a customer requires it.

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29. Id.

30. “Barriers to Using Automatic Teller Machines”, Tim Noonan, available at [http://www.hreoc.gov.au/disability\\_rights/inquiries/ecom/atmpaper.htm](http://www.hreoc.gov.au/disability_rights/inquiries/ecom/atmpaper.htm), last viewed on July 26, 2012.

- Ease of understanding: Make the instructions — both in the physical banks as well as in ATMs and websites — simple and precise, so they are easily understood. This will help all customers, not just those with disabilities.
- Technical solutions: One solution available in some countries is using a phone-to-text machine or software that enables hearing impaired customers to use the phone banking and customer care services of a bank. For example, the Royal Bank of Scotland users can use a Tynetalk or BT Textdirect service which will enable them to speak to an operator and so convey their messages.<sup>31</sup> If a bank feels that sufficient customers will benefit from such a technology, it should invest in it.
- Sign language interpretation: A more low-tech solution is to offer interpretative services, where customers who need it can be assisted by someone who is proficient in sign language who can help relay their point across to the bank.

#### **4.2 Problems faced by the visually impaired while banking**

Visually impaired customers can find it difficult to navigate and even reach their banks, if the path is not clear and if the building is not provided with enough ramps and clear entrances. Even understanding the terms and conditions of banks and their services are difficult to comprehend, because the language used to describe services and procedures is confusing and complicated. Often, a booklet with the terms and conditions is simply handed over with no concern for how the person is supposed to read them. Visually impaired people might also face problems in distinguishing details on cheques and other financial instruments which, unlike currency, do not have physically distinguishable marks on them.

Visually impaired customers often face a lot of problems while using ATMs, because the keys are not marked with recognisable lettering in Braille. Even when there is a token raised symbol on the middle key or Braille markings on the keypad for tactile recognition, there is still the problem that what is being displayed on the touchscreen, as well as the instructions on how to proceed with a transaction, are not capable of being communicated. Most ATMs in India are not equipped with an audio jack, and so can't be used by blind customers who want to connect headphones and hear the display on the screen.

There is also the problem of signature mismatches, especially when it comes to opening accounts and signing cheques. Currently the bank's solution is to not have the person with disability/iessign the cheque, which is not a solution that works consistently, especially when a person with disabilities is running a company. There should be a separate process in place to facilitate issuance of cheques by the visually impaired.<sup>32</sup>

The first and most obvious problem with the visually impaired using netbanking and other services on the internet is that they won't be able to see the screen. Similarly, when they

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31. See generally: Accessibility at the RBS, available at <http://www.bankofscotland.co.uk/accessibility/hearing-impaired/>, last viewed on July 20.

32. In conversation with Mr. George Abraham, CEO, SCORE Foundation. Ms. Radhika Alkazi, Managing Trustee of Aarth-Aastha also pointed out that in many instances, banks often ask persons with disabilities to bring someone else to sign for them (or operate the account on their behalf) even when the person is fully capable of signing and operating the account themselves. There is no fixed basis for the procedure, which varies from bank to bank.

attempt to use the ATM machines, the screen cannot be read and the keyboard functions are often unclear. The problem is often accentuated for people with low vision, because the improper lighting, low contrast print and other glares make it difficult to make out what the screen says.<sup>33</sup> Some sites have a security requirement where users have to input CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart) codes in order to validate their payment or to register for a particular service; using such security codes can be particularly problematic for blind customers.<sup>34</sup> Banks websites might have pop ups or automatic music playing, which makes it difficult for the visually impaired to use their screen readers.

What can banks do?

- Training: Sensitise the staff to the needs of blind customers, and ensure that there is a customer care executive who is present in case a visually impaired customer needs assistance with a particular service.
- Accessible formats: Printing out bank documents or statements in large size fonts, Braille or in audio script format if required is the first thing that banks can do to assist their visually impaired customers. Banks can also try to migrate towards accessible e-text or DAISY formats for their disabled customers.
- Banking Guide: Coming out with a bank note guide to help identify the different bank notes and counterfeits, if any, is also important for visually impaired people who rely on their sense of touch. Similarly, an accessible format guide that takes you through the various steps that are involved in withdrawing cash or using an ATM would greatly assist the blind customers who are using a new format or type of bank machine for the first time. At the same time, increasing the screen size and resolution of ATM screens would go a long way in improving access to the customers.
- Templates: Banks can also be encouraged to come out with cheque book templates, so that blind users can familiarise themselves with using such bank documents and the process of writing cheques becomes easier for them.<sup>35</sup> Banks should also develop a better solution to the problem of visually impaired customer's inability to sign cheques.
- Open format statements: Banks should also ensure that when they provide customers with statements, they are made available in open formats, such as HTML or RTF, so that they can easily be read by screen readers.
- Technical solutions: There are some alternatives to the CAPTCHA codes available, such as audio codes or maths questions. Some sites have the option of hearing the codes, instead of just seeing them. There are also human aided accessible CAPTCHA services (such as Solona), where the customer can send a screenshot of the screen to an aide. However, this has several security and privacy implications, and so is not an ideal solution. Multimedia on the websites of banks should be made optional, with a clear possibility of turning the music or animation off, so that users can use the screen reader without any problems.

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33. "Barriers to Using Automatic Teller Machines", Tim Noonan, available at [http://www.hreoc.gov.au/disability\\_rights/inquiries/ecom/atmpaper.htm](http://www.hreoc.gov.au/disability_rights/inquiries/ecom/atmpaper.htm), last viewed on July 26, 2012.

34. "The Challenges of Blind Internet Users", available at <http://www.evengrounds.com/blog/challenges-of-blind-internet-users>, last viewed on July 15.

35. See generally: Accessibility at the RBS, available at <http://www.bankofscotland.co.uk/accessibility/visually-impaired/>, last viewed on July 20.

- Improved ATMs: Several banks around the world are switching to constructing ATMs which give an output in multiple formats, such as audio and large-font print,<sup>36</sup> which makes them much more user friendly. There are several guidelines in effect in various jurisdictions which describe better design for ATMs, which takes into account the physical needs of disabled customers; newer ATMs which are constructed should be asked to conform to such standards. While this is slowly starting to take place, more banks need to expand and improve their building structures keeping such guidelines and needs in mind. This has been discussed in the next section on ATM Guidelines.
- Sensitisation: Special care should be taken to explain terms and conditions to visually impaired persons — there should be an effort to ensure that the person who is opening an account has understood the various terms and conditions and not just heard them.

#### **4.3 Problems faced by those with physical disabilities while banking**

In India, a major problem is the physical accessibility of banks, with hardly any buildings being equipped with ramps and elevators; even if the bank itself is made accessible via these architectural modifications, the area surrounding the bank, for example, the market place, might be difficult to reach for people in wheelchairs, ultimately making it very difficult for them to use banks.

People with physical disabilities might find controlling their limbs for prolonged periods to be a problem, and so would find it difficult to use not just the physical banking services, but also internet services which necessitate controlling a mouse for a long period of time.

What can banks do?

- Build ramps: The most important step that needs to be taken by different banking institutions is ensuring that their ATMs and branches are accessible through a ramp, so that it is physically possible to reach from the road or other public area.
- Elevators: Where possible, elevators should also be provided.
- Special measures: Within the bank, there should be special provisions for people in wheelchairs or crutches, such as a designated queue and teller, so that they do not have to wait in queue for a long period of time.

#### **4.4 Problems faced by those with cognitive disabilities while banking**

People with cognitive disabilities might have lower attention spans and might have problems with understanding complicated bank procedures and requirements. If the steps involved in using an ATM or other physical transactions are not logical and simple, people with cognitive disabilities will be unable to handle them. As a lot of Indian banks are rather chaotic and the transactions lack a certain consistency, people with cognitive disabilities could face a lot of problems adjusting. People who have cognitive disabilities might also be relying on their guardians or parents to assist in operating their bank accounts, and legal and bureaucratic hurdles to doing so can be a big hassle.

The front staff at banks are often improperly trained and do not have a holistic understanding of how to deal with people with disabilities. It has also been observed that while banks can be

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36. Consider the development of such ATMs by Wells Fargo bank in the USA; more details are available at <https://www.wellsfargo.com/about/diversity/accessibility/>.

helpful while opening accounts, they are not open-minded about granting loans to people with disabilities.<sup>37</sup>

Customers who are autistic have hand function issues which can cause their signatures not to match the ones on record, which again causes problems when it comes to opening accounts or signing cheques which ultimately bounce.

What can banks do?

- Sensitisation: Sensitise the staff to the special needs of customers with cognitive disabilities.
- Display of information: Information for guardians of such customers, on the requirements for opening bank accounts, should be prominently displayed in the branches of the bank (Refer to Section 4.3.4).
- Uniformity in procedures: Banks should make uniform guidelines or procedures to be followed for each transaction, so that there is a certainty and regularity that eases the way for people with cognitive disabilities
- Clear language: Banks should also ensure that they use extremely simple and clear language in all their transactions as well as literature in order to mitigate confusion.<sup>38</sup>
- Identity establishment: There need to be rules put in place to allow those who are unable to sign properly to establish identity in some other manner.

## 5. Guidelines on Banking Services and Technology

The previous section has looked at some of the problems being faced by people with disabilities when they access banking services in India. This section will look at some guidelines and best practices which are aimed at increasing the accessibility of services.

### 5.1 Mobile banking

There is the possibility of accessing a variety of financial services through mobile devices, which are termed as mobile banking or “m-banking”. This accessibility means that a lot of people with disabilities who live in rural areas, who have earlier not been able to access banks, can now do so using their mobile phones. Mobile banking also makes it much easier for customers with bank accounts to access their details and do transactions — for people with disabilities, this is a big step forward, as it means they do not have to endure the hassle and inconvenience of going to a bank, where they may not find the assistance that they need.

Currently, mobile banking is not that prevalent in India; less than one percent of current bank customers are covered under the mobile banking services.<sup>39</sup> However, the growth in mobile

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37. In conversation with Mr. Anil Joshi, the Programme Director of Human Ability and Accessibility at IBM, who works with parents of children with Down’s Syndrome and other mental disabilities. He also pointed out that given that only a miniscule portion of people with disabilities are able to understand banking concepts, the few who do so invariably use banking facilities with the help of their parents or guardians.

38. “Barriers to Using Automatic Teller Machines”, Tim Noonan, available at [http://www.hreoc.gov.au/disability\\_rights/inquiries/ecom/atmpaper.htm](http://www.hreoc.gov.au/disability_rights/inquiries/ecom/atmpaper.htm), last viewed on July 26, 2012.

39. “Customising mobile banking in India: issues and challenges”, Address delivered by Shri Harun R. Khan, Deputy Governor, Reserve Bank of India, at the FICCI-IBA (FIBAC) 2012 Conference on-“Sustainable

banking transactions has shown an increasing trend. For example, in the month of June 2012, 3.43 million transactions amounting to Rs. 3067.10 million were processed, as compared to 1.41 million transactions amounting to Rs. 984.66 million processed in June 2011 — an increase of about 143 per cent in volume and approximately 211 per cent in value terms.<sup>40</sup>

The Reserve Bank of India has passed some operating guidelines for mobile banking transactions.<sup>41</sup> These guidelines specify the technology and security standards, as well as the requirements for interoperability between operators, transaction limits and procedure for grievance redressal. They also tackle customer protection issues.

Banks should leverage the flexibility and utility of mobile banking in increasing access to their customers who have disabilities, as it would mean lesser expenses for both the banks as well as the customers.

## 5.2 Internet banking

Internet banking is increasingly popular with customers, due to its convenience and ease of use; it removes the necessity of physically going to a bank. Since physical banks are often difficult for people with disabilities to navigate, internet banking could provide the best solution (though there are several problems with this medium as well, as have been described in the previous chapter). However, banks can make their websites more accessible and follow the prescribed guidelines to ensure a better banking experience not just for their disabled customers, but for all customers.

The biggest obstacle that comes with developing netbanking options which are accessible to all is the wide diversity in the people who are trying to access the banks' websites, and it is here that universal design comes into play. "The goal of universal design is to have each web page accessible by all people, instead of providing separate web pages for people with disabilities. This requires, for example, for people who are blind, textual equivalents for all images, and reading order and structure compatible with screen reading; for people who are deaf, visual equivalents such as captions for all audio information; and for people with motor disabilities, means to navigate the page without fine motor control."<sup>42</sup>

There are a set of standards in place for website accessibility. The Web Content Accessibility Guidelines ("WCAG") 2.0 specify the manner in which the material on any website is to be perceivable, operable, understandable and robust.<sup>43</sup> Under these four stated principles of web content accessibility, twelve guidelines have been given, which give the web content developers a framework and set of objectives to understand the needs of the disabled. There are also levels of conformance that are defined for each guideline, and a list of sufficient and advisory techniques has also been given.<sup>44</sup>

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excellence through customer engagement, employee engagement and right use of technology" on September 5, 2012 at Mumbai, available at [http://www.rbi.org.in/scripts/BS\\_SpeechesView.aspx?id=726](http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?id=726).

40. Id.

41. Available at [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?Id=1660](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=1660).

42. Leonard R. Kasday, "A Tool to Evaluate Universal Web Accessibility" Posters, Proceedings of the 2000 International Conference on Intelligent User Interfaces 2000, pp. 161-162.

43. See generally: "WCAG 2 at a Glance", available at <http://www.w3.org/WAI/WCAG20/glance/>.

44. See generally: "Website Accessibility", available at <http://www.tiresias.org/research/guidelines/web.htm>.

The WCAG 2.0 Guidelines includes some basic steps, such as including text alternatives for all non-text objects, including descriptors or captioning for images, audio and animated sequences, and following a style sheet wherever possible, in order to maintain a consistent design. The guidelines deal with visibility and display (using contrasting colours for background and text; using relative sizing so that the text can be increased to upto 200 per cent), functionality (providing skip links such as “Back to Top”; ensuring that animation can be paused or switched off; ensuring keyboard as well as mouse functionality), and formatting (ensuring the text is not justified; setting the language attribute of each page; providing clear navigation mechanisms; ensuring that all mark up is validated and coded correctly), amongst others.<sup>45</sup>

The National Informatics Centre (NIC) has developed some guidelines for government websites, which contain best practices for accessibility in website design; these guidelines were released in 2009, and are mandated for governmental websites. The guidelines are classified into three categories: mandatory, advisory and voluntary; a compliance matrix has been provided for various departments and organisations to assess their compliance with the guidelines.<sup>46</sup> It is crucial that banks comply with these guidelines to ensure that a certain basic minimum standard at web accessibility is met for the banking customers across all websites.

Another dimension which is unique to India is that of regional language; for banking customers who are not comfortable with English, it is recommended that bank websites be provided in major regional languages as well. The best way to display regional fonts is to use Unicode (UTF-8). Banks should ensure that Unicode is used to display the fonts, as otherwise the fonts can become garbled and a person using a screen reader will not be able to access the written material at all.

The most important guidelines to be kept in mind are that visual information should also be coupled with audio information, and that frequency and volume of the audible cues should be capable of being configured and controlled by the user.<sup>47</sup>

### **5.3 Automatic Teller Machines (ATMs)**

The number of ATMs and their penetration in India is very low: 63 ATMs and 497 points of sale per million population,<sup>48</sup> and a number of regulatory and commercial requirements have led to their relative low (though increasing) use in India. RBI has recently passed guidelines on operating White Label ATMs<sup>49</sup> which effectively open up most of the acquiring part of the process to non-bank independent players.<sup>50</sup> This should ensure that there is a greater increase

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45. For more details, see generally: “Website Accessibility”, available at <http://www.tiresias.org/research/guidelines/web.htm>.

46. The Compliance Matrix can be accessed at <http://web.guidelines.gov.in/compliance.php>.

47. “Deaf and Hearing Impaired”, Woei-Jyh Lee, Handbook of Universal Usability in Practice, available at <http://otal.umd.edu/UUPpractice/hearing/>, last viewed on 23 July, 2012.

48. “ATM Usage very low in India, says RBI”, available at <http://www.firstpost.com/economy/atm-usage-very-low-in-india-says-rbi-404198.html>.

49. Available at <http://rbi.org.in/scripts/NotificationUser.aspx?Id=7286&Mode=0>.

50. Harsh Vardhan, “White Label ATMs”, available at <http://ajayshahblog.blogspot.in/2012/08/white-label-atms.html>.

in the number and penetration of ATMs in India, which will be beneficial for people with disabilities only if the ATM-makers ensure that minimum guidelines for the disabled are met with.

Currently there are no guidelines in India on how to construct ATMs in accordance with the needs of people with disabilities. However, banks can take guidelines from other jurisdictions as their guide and look at how other countries have handled the issue of making ATMs more accessible. It is hoped that this lacuna in the policy will be filled soon.

The American Department of Justice recently notified a final ruling on the standards of accessibility relating to ATMs under the Americans with Disability Act (“ADA”). Such standards range from requirements that signs be in Braille, a voice guidance system, and input controls for blind users.<sup>51</sup> These standards took effect in March 2011, and had a March 2012 compliance date. All ATM owners are to comply with these guidelines when constructing or altering ATMs.

Some salient features of these guidelines are:<sup>52</sup>

- Height and reach: It is mandated that the ATM’s reach should be between 15 and 48 inches. Further, the graphic area where the touch commands are input needs to be lowered to the desired height.
- The input device should be tactile, and so the surface of the keys should be different from the base and this should be apparent by touch. The keypad should also be arranged in a standard 12-key ascending or descending layout, as seen in telephones or computers.
- ATMs must be equipped with both voice guidance systems as well as Braille language signage. This would mean adding a headphone jack to the machine, so the audio is heard only by the user and thus ensuring his privacy.
- The display in the ATM needs to be clear; from an observation point 40 inches above the floor in front of the machine, the letters should appear in a sans serif font, with a minimum height of 3/16 inches, in a colour contrasting to the background.
- There is also a requirement of equal services, which means that all services offered at any location through a bank’s ATM must also be provided by an “accessible” ATM in the same location. For this purpose, each installation is to be considered as a separate location.

#### 5.4 Currency

For currency to be the most effective as a means of payment, all users should have barrier-free access. The ability to conduct financial transactions using bank notes is crucial to independent living.<sup>53</sup> Yet this can pose significant challenges for individuals who are blind or partially sighted.

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51. “Department of Justice Finalises New ATM Accessibility Standards”, available at [http://www.diebold.com/solutions/atms/opteva/html/Diebold\\_AccessibilityStandards.pdf](http://www.diebold.com/solutions/atms/opteva/html/Diebold_AccessibilityStandards.pdf), last viewed on July 12.

52. “Department of Justice Finalises New ATM Accessibility Standards”, available at [http://www.diebold.com/solutions/atms/opteva/html/Diebold\\_AccessibilityStandards.pdf](http://www.diebold.com/solutions/atms/opteva/html/Diebold_AccessibilityStandards.pdf), last viewed on July 12.

53. “Making Bank Notes Accessible for Canadians Living With Blindness or Low Vision”, Carolyn Samuel, available at <http://www.bankofcanada.ca/wp-content/uploads/2011/08/samuel.pdf>.

Physical currency (both notes and coins) are confusing and often cannot be distinguished from each other by merely feeling them. There is a great similarity between the hundred, five hundred and thousand rupee notes, as well as in the coins which are now completely confusing. Notes should also be discernible to the colour blind, which in their current form is not always possible. Various representations have been made to the Government of India on this regard and the change required is only a small one, though no changes have so far been forthcoming.

India can learn from the example of other countries which have experimented in the past with introducing currency which is friendlier to people with disabilities. Whether it is the printing of differently coloured notes, or the development of “raised-texture tactile features”<sup>54</sup>, there are several alterations that can be made to the currency. In India, the bank notes come with raised texture shapes to help the visually impaired to identify the different notes, and also come in different colours, though further improvements can be made. This problem is exacerbated in the coins — earlier, there was a differentiation in shape between them, but the newly minted coins of denominations Rs. 1, Rs. 2 and Rs. 5 are all very similar, and differentiating between them is a big problem.

In countries such as Canada, development of bank notes is based on a “continuous process that relies on scientific and empirical research, together with direct feedback from bank note user groups and experts. The bank consults Canadians living with blindness and low vision, as well as their representative organizations and vision experts, to identify the needs of this community and to explore potential solutions.”<sup>55</sup> It is this sort of consultative process that needs to be incorporated by the Reserve Bank of India, as well.

### **5.5 Telephone banking**

Telephone banking is in its nascence in India and not all banks provide it. Furthermore, there are no guidelines in place to govern how telephone banking would take place. For people with disabilities, telephone banking could be very useful, if the proper tools are made available to them. Banks can look at the draft guidelines of other countries (refer to section 8 of the Report) which have provisions for phone banking to see what kind of procedure they should follow.

## **6. Converting to Accessibility in India**

Making banking accessible is not just in the commercial interest of the bank but is also in line with its commitments under various legislation and international conventions. In India, this has even been acknowledged by RBI, which has issued a notification<sup>56</sup> suggesting that at least one-third of the new ATMs of all banks must be accessible.<sup>57</sup> Dinesh Kaushal has studied<sup>58</sup> some examples, such as the Punjab National Bank, which has set up some talking ATMs in Jaipur, or the State Bank of India which in 2010 announced plans of installing 7000 talking ATMs, but

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54. Id.

55. Carolyn Samuel, “Making Bank Notes Accessible for Canadians Living With Blindness or Low Vision”, available at <http://www.bankofcanada.ca/wp-content/uploads/2011/08/samuel.pdf>.

56. (DBOD.No.Leg.BC.123 /09.07.005/2008-09), available at

57. Refer to Section 4.3 of the Report.

58. Dinesh Kaushal, “The Case for Accessible Banking”, available at <http://cis-india.org/accessibility/accessible-banking>.

there is no news on the status of this goal. Currently the bare minimum target set by RBI is also not being met.

Subsequent to the RBI notifications, some positive developments have started taking place. The Union Bank of India has indicated that it will deploy over 100 Voice Guided ATMs — which not only allows access to visually impaired people but also people with physical disabilities through ramps for wheel chair access.<sup>59</sup> Half of these ATMs are to be put up in the banks, and the other half in passport offices. The ‘Talking ATM’ is designed as per Access for All (AFA) standards and comprise of accessible key pads, voice-guidance technology, Braille stickers and multi-lingual capability. When a visually challenged person attaches his headphone set to this ATM, he can hear the instruction which enables him to fill-in the required data using the numeric keypad. Apart from reading aloud screen messages, the machine provides complete orientation making it easy for the customer to use the machine. An important security feature of this ATM is that it provides the person an option to blank out the screen as a safety mechanism to avoid shoulder surfing by any bystander trying to access customer data during the transaction.<sup>60</sup>

The NCR Corporation India, which has a 47.5 per cent share in the country’s ATM business, has stated that it will install 50 ‘talking’ ATMs in various passport offices.<sup>61</sup> The company set up India’s first talking ATM in Ahmedabad for the visually impaired under the Union Bank of India initiative described above. Importantly, the managing director of the ATM company stated that while the hardware of the ATMs remains the same, the software customisations depend on the specific needs. Banks do not need to change their entire fleet of ATMs for installation of new solutions.<sup>62</sup>

One concern that arises when we consider questions of accessibility is: what would be the cost of altering the present technology and infrastructure? If the cost of making banking accessible is too prohibitive, it would not be in the interests of the banks to do so.

“A talking ATM is the regular ATM with an additional module that allows a blind person to get the information in audio format. A talking ATM could be configured so that when a user plugs in a headphone in the audio jack, the ATM would start talking to the person with audio messages...Installing talking ATM technology is not very expensive. It might range anywhere between Rs. 25,000 and Rs. 50,000.”<sup>63</sup>

There needs to be an evaluation of the present ATMs to see if merely upgrading the software would suffice in converting them to speaking ATMs — if this is the case, it can be done so with the help of the manufacturer at a low cost. The evaluation would also help the banks identify

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59. NR Indran, “UBI to deploy Mumbai’s first Talking ATM for the visually challenged”, available at <http://apnnews.com/2012/07/09/ubi-to-deploy-mumbai%E2%80%99s-first%E2%80%98talking-atm%E2%80%99-for-the-visually-challenged-powered-by-ncr/>.

60. Id.

61. “NCR Corp to set up 50 Talking ATMs in passport offices”, available at <http://iflegal.com/2012/09/ncr-india/>.

62. “NCR Corp to set up 50 Talking ATMs in passport offices”, available at <http://iflegal.com/2012/09/ncr-india/>.

63. Dinesh Kaushal, “The Case for Accessible Banking”, available at <http://cis-india.org/accessibility/accessible-banking>.

those machines which can be upgraded by the addition of some simple technology and hardware, while the others could be marked for eventual replacement. At the same time, the new machines that are set up by the banks should be audio-enabled; this should not be difficult as “all new ATM installations are audio enabled, as all major ATM manufacturers now produce talking ATMs including Triton, NCR, Wincor-Nixdorf, Diebold, and Fujitsu.”<sup>64</sup>

Under the Americans with Disability Act, the determination of when an undue burden is placed on an establishment which has to make its services accessible is to be determined on a case by case basis, and would be considered keeping in mind factors such as the nature and cost of the upgrades, the availability of alternatives and the resources present with the financial institution in question.<sup>65</sup> Such a system should be incorporated in India as well, where the ability of the bank is considered when seeing the efforts it needs to make when converting its services to make them more accessible.

Union Bank of India’s Accessible and Talking ATM has brought in many initiatives for the first time, like the use of bilingual Indian accent text-to-speech (TTS) voices in English and Hindi, accessible infrastructure for the physically disabled and complete voice guidance support for ATM operation.<sup>66</sup> These should set the benchmark for other banks who want to improve the accessibility of their services as per the guidelines set forth by RBI.

## **7. Case studies and Guidelines in Other Countries**

Looking at the guidelines that are present in other countries can be helpful in determining how banks in India should go about improving their services. The following countries have specific provisions in place which regulate or instruct how banks should handle their disabled customers.

### **7.1 New Zealand**

The New Zealand Banker’s Association published a set of Voluntary Guidelines to meet the needs of older and disabled customers, which aim to improve access to banking services for such customers.<sup>67</sup> The guidelines recognise the increasing importance of older and disabled customers to banks as well as the importance of meeting their needs and demands. The guidelines direct the member banks to give training to the staff in order to better help the disabled customers, as well as directing them to have specific procedures in place in case financial irregularities or abuse occurs in bank accounts of people with disabilities. There are directions on improving physical accessibility (such as providing for low tables, ramps in ATMs, queuing aisles wide enough for wheelchairs and so on), as well as giving specific customer care help to those who need it, such as consulting the needs of the disabled when developing new services, having a provision for a reduction in fee if some customers are unable to use certain features, and having a provision for personal banking in special cases at no additional cost.

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64. Id.

65. “Department of Justice Finalises New ATM Accessibility Standards”, available at [http://www.diebold.com/solutions/atms/opteva/html/Diebold\\_AccessibilityStandards.pdf](http://www.diebold.com/solutions/atms/opteva/html/Diebold_AccessibilityStandards.pdf), last viewed on July 12.

66. See more details at [http://www.unionbankofindia.co.in/personal\\_TalkingATMs.aspx](http://www.unionbankofindia.co.in/personal_TalkingATMs.aspx).

67. These guidelines are available at <http://www.nzba.org.nz/banking-standards/code-of-banking-practice/voluntary-guidelines-to-assist-banks-to-meet-the-needs-of-older-and-disabled-customers/>.

There are also specific provisions in the Guidelines for things such as ATM construction. Section 5.9 of the Guidelines specifies the factors to be kept in mind while designing ATMs: large screens, audible output, tactile differentiation in the keys, easy prompts in clear language and so on.<sup>68</sup> Section 5.10 talks about improving the accessibility of online banking and how bank websites should be designed, and recommends the use of international W3C web accessibility best practice standard, the accessibility-related New Zealand e-government web standards.<sup>69</sup> Finally, the Guidelines also talk about basics, such as clear and large font prints in their literature, and providing information in several formats (including Braille, DVD, and audio) wherever possible, to facilitate bank use by people with disabilities.<sup>70</sup>

## 7.2 Australia

The Disability Discrimination Act, 1992 (“DDA”) makes it unlawful to discriminate against a person on the grounds of a disability.<sup>71</sup> The objects of the DDA include eliminating, as far as possible, discrimination against people with disabilities and promoting recognition and acceptance within the community that people with disabilities have the same fundamental rights as the rest of the community. The law is administered by the Human Rights and Equal Opportunity Commission and sets out specific areas in which it is unlawful to discriminate. These areas include accommodation, employment, access to premises, and the provision of goods, services<sup>72</sup> and facilities. The HREOC administers the legislation, which includes complaints handling, public inquiries, policy development and education and training. The Commission has supported the development of several voluntary guidelines that determine accessibility in the sphere of banking.

The Australian Bankers’ Association (“ABA”) has worked with the community to produce voluntary Industry Standards in 2002 which aim to improve the accessibility of electronic

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68. Id.

69. Id.

70. Id.

71. Section 4 of the DDA defines disability in relation to a person as:

- a. total or partial loss of the person's bodily or mental functions; or
- b. total or partial loss of a part of the body; or
- c. the presence in the body of organisms causing disease or illness; or
- d. the presence in the body of organisms capable of causing disease or illness; or
- e. the malfunction, malformation or disfigurement of a part of the person's body; or
- f. a disorder or malfunction that results in the person learning differently from a person without the disorder or malfunction; or
- g. a disorder, illness or disease that affects a person's thought processes, perception of reality, emotions or judgment or that results in disturbed behaviour;

and includes a disability that:

- a. presently exists; or
- b. previously existed but no longer exists; or
- c. may exist in the future; or
- d. is imputed to a person.

72. Section 4 of the DDA defines a service as relating to, amongst other things, banking, insurance, superannuation and the provision of grants, loans, credit or finance, and including financial and information services provided, for example, through websites, telephones, ATMs and EFTPOS.

banking. These standards cover a range of areas: ATMs, Electronic Funds Transfer at the Point of Sale, Automated Phone Banking and Internet banking.<sup>73</sup>

The voluntary standards for ATMs<sup>74</sup> cover a broad range of topics, including their access and location, their operation, the method of swiping and removing the cards, the display, the keypad, the output, security and privacy for the users, and finally, installation and operating instructions. There is a checklist provided with the recommended detailed standards for each of the above areas.

Electronic Funds Transfer at Point of Sale<sup>75</sup> occurs when funds are directly transferred from a cardholder's bank account to the retailer, when the cardholder's magnetic stripe card is swiped in an EFTPOS terminal. Cardholder authentication occurs by signature or Personal Identification Number (PIN). These standards cover areas such as access and location of the EFTPOS terminals, process of swiping, inserting or removing the card, operating instructions, display, keypad and output options, amongst others. A helpful checklist has been provided for EFTPOS deployers to assess whether their machines are disabled-friendly.

The guidelines on phone banking<sup>76</sup> deal with financial services which are available to the customer via the telephone, that can be used by the customer without having to converse with an employee of the financial institution. The guidelines look at certain design principles, best practices for input and navigation, output, documentation, the role of TTY Communications and Relay Operators, and dealing with timeouts and errors. Like with the other standards, a checklist with the best practices as per the guidelines has been provided.

The standards on internet banking<sup>77</sup> looks at various aspects of financial transactions taking place on the internet, and prescribe guidelines for design and implementation (for example: compliance with the WCAG1.0 standards), feedback and testing of accessibility, compatibility, enhanced usability (in areas such as navigation, registration, login, information redundancy and so on), consistency and user support. A specification checklist is also provided, so that owners can comfortably see whether their site is compliant with the guidelines or not.

There is an action plan for the above four set of guidelines, to check their implementation and to identify problems and barriers that may arise in the future.<sup>78</sup> Though these guidelines are voluntary, it is worthwhile to consider the example of such a detailed action plan, as

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73. For a full list, please refer to: <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/Industry-Standards---Accessibility>, last accessed on 12<sup>th</sup> August, 2012.

74. Refer to <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/ATM-Standard>.

75. Refer to <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/EFTPOS-Standard>.

76. Refer to <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/Automated-Telephone-Banking-Standard>.

77. ABA Industry Standard on Electronic Banking, available at <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/Internet-Banking-Standard>.

78. Refer to <http://www.bankers.asn.au/Industry-Standards/ABAs-Accessibility-of-Electronic-Banking-/Australian-Banking-Industry-E-Commerce-Industry-Action-Plan>.

implementation of any sort of guidelines will only become more efficient if something like this is followed.

The Australian Banker's Association has also come up with a set of Guiding Principles for Accessible Authentication, which recognizes that "accessibility issues need to be considered in the deployment of authentication technologies, to ensure that people with disabilities and older people are not disadvantaged... The purpose of the Guiding Principles is to provide a framework for financial institutions to help reach a workable balance between security requirements, commercial strategies and equitable access to banking products and services."<sup>79</sup> The Principles aim to follow certain universal design principles, of equitable and flexible use, minimal effort, simple and intuitive design, amongst others. They are as follows:<sup>80</sup>

- Accessibility of authentication technologies: Financial institutions should ensure that authentication technologies are accessible to all customers, or where this is not possible, a human-based alternative authentication system needs to provide equivalent amenity and convenience.
- Customer convenience: All customers should be able to undertake their personal and business financial activities conveniently and safely.
- Authentication planning: Financial institutions should consider the accessibility needs of customers with disabilities and older customers as part of authentication technology planning.
- Authentication testing: Financial institutions should consult customers with disabilities and older customers as part of planning and testing accessibility of authentication technologies.
- Registration, login and transaction procedures: Financial institutions should ensure that registration, login and transaction procedures are as accessible as possible to all customers.
- Messages and error recovery: Financial institutions should ensure that online messages are unambiguous and written in "plain English" and that error recovery processes are efficient and accessible.
- Staff and customer training: Financial institutions should provide relevant customer support staff with appropriate disability awareness training so they are aware of the needs of customers with disabilities and older customers. In addition, financial institutions should provide customers with information and training in the use of available authentication technologies.
- Raising staff, business and customer awareness: Financial institutions should develop a strategy for enabling relevant management and staff awareness of these Guiding Principles. In addition, financial institutions should promote the availability of alternative accessible authentication technologies with their customers.
- Confidentiality of customer information: Financial institutions must ensure the confidentiality of information of customers with disabilities and older customers.

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79. "Background to the Guiding Principles", Section 1.1 of the ABA Guiding Principles for Accessible Authentication, available at [http://www.bankers.asn.au/ArticleDocuments/177/ABA-Guiding\\_Principles\\_for\\_Accessible\\_Authentication.doc.aspx](http://www.bankers.asn.au/ArticleDocuments/177/ABA-Guiding_Principles_for_Accessible_Authentication.doc.aspx).

80. Id.

- Security of transactions and transaction fees: Financial institutions should ensure that customers with disabilities and older customers are not exposed to higher financial risks or costs as a result of the deployment of authentication technologies.

### 7.3 United States of America

The 2010 Standards under the ADA have set out detailed requirements to make ATMs accessible, as was discussed in the previous section of the paper. These elements are considered by the Department of Justice to be Auxiliary Aids and Services (and not structural elements) and the safe harbour provision does not apply to them.<sup>81</sup>

Though American ATMs have been equipped with text to speech functions and have been subject to height and space requirements for many years, the new rules provide for additional security and instructional features for disabled customers.<sup>82</sup>

All the ATMs which come under the scope of the ruling will have to be speech enabled; further, there are specifications as to the height requirement (the machine should be between 15 and 48 inches in height). There is a requirement that the input area be not just touchscreen, and it should be tactilely discernible from the surrounding surface; the keypad should be arranged in a manner that is common and easy to remember. Instructions about the use of the ATMs should be given in Braille and equal services should be offered to all customers, irrespective of their disabilities.

Subsequent to the passing of the ruling, the American Bankers' Association recommended that banks be aware of the legal requirements under the Americans with Disabilities Act; ABA advocated that banks make a careful audit of their existing machines, and compare them to the standards to which they need to conform. In case the machines need to be upgraded, the machine manufacturers would have to be contacted in order to make alterations, if necessary.

### 7.4 Canada

Canada has issued standards for “self-service interactive devices”,<sup>83</sup> the umbrella term under which ATMs would fall, the purpose of which is to specify minimum accessibility and usability requirements for self-service interactive devices intended for public use. The standard specifies accessibility requirements for automated banking machines (ABMs) — both stand-alone and wall mounted — and ABM sites. There are specifications which give the various minimum dimensions that must be conformed to when constructing such self-service interactive devices.

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81. “Department of Justice finalises New ATM Accessibility Standards”, available at [http://www.diebold.com/solutions/atms/opteva/html/Diebold\\_AccessibilityStandards.pdf](http://www.diebold.com/solutions/atms/opteva/html/Diebold_AccessibilityStandards.pdf), last viewed on July 12.

82. See generally: “Department of Justice finalizes new ATM accessibility standards”, available at [www.diebold.com/solutions/atms/opteva/html/Diebold\\_AccessibilityStandards.pdf](http://www.diebold.com/solutions/atms/opteva/html/Diebold_AccessibilityStandards.pdf).

83. A summary is available at “Standard B651.1-09”, sourced from [http://hub.eaccessplus.eu/wiki/Canadian\\_standard\\_for\\_accessible\\_design\\_for\\_automated\\_banking\\_machines](http://hub.eaccessplus.eu/wiki/Canadian_standard_for_accessible_design_for_automated_banking_machines), and a full text can be purchased from the Canadian Standards Association website.

However, the standards do not look at the technological aspect, specifically excluding it from their purview and giving that responsibility to the relevant authority.<sup>84</sup>

It is interesting to note that the steering committee that ultimately led to the adoption of the standards was pulled together by the Canadian Banker's Association, and the committee included representatives from the major Canadian banks.<sup>85</sup> The committee recommended that there be a mandatory requirement for audible instructions and the provision for attaching headphones to an automated banking machine; it would be the duty of the financial institution to provide the headsets to the disabled customers, along with a list of machines where they could be used. The committee also looked into the issue of the cost of making the machines and other areas more accessible, and though they were waiting for more conclusive research, they were hesitant about the prohibitive cost of major redesigns.<sup>86</sup>

## 7.5 Netherlands

In 2007, the Dutch National Forum on the Payment System produced a document in English on "Guidelines for user-friendly payment terminals". These guidelines include advice on making payment terminals accessible and easy to use for people with disabilities and older people.<sup>87</sup> The guidelines describe certain standardised elements of the PIN payment procedure, the user interface and advocates practical values for the same.<sup>88</sup> The document then goes on to specify important design principles which must be kept in mind while considering the accessibility of payment gateways and banks; the guideline is designed in such a way that if the design principles are to be kept in mind, the subsequent ergonomic principles which have been described will be easy to meet.<sup>89</sup>

## 8. Suggestions and recommendations

The report illustrates that though banks are mandated to ensure that there is accessibility in banking services in India, there is still a lot that needs to be done. There are several measures that can be taken up by banks, which will not be costly and which will be especially rewarding for customers with disabilities:

- Compliance with RBI Guidelines: Banks should ensure a basic minimum compliance with the guidelines set forth by RBI for increasing access to banking services as described in Section 4.3 of the Report.
- Compliance with International norms: Banks also need to ensure a basic minimum compliance with international norms, such as the WCAG 2.0 standards for websites, so that people with disabilities can access the bank websites with ease.

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84. "The extent to which technical requirements are applied is the responsibility of others, such as the authority having jurisdiction."

85. "Barrier Free Banking", available at <http://www.abilities.ca/agc/article/article.php?pid=&cid=&subid=&aid=429>.

86. Id.

87. "Dutch Guidelines for User Friendly payment terminals", available at [http://hub.eaccessplus.eu/wiki/Dutch\\_Guidelines\\_for\\_user-friendly\\_payment\\_terminals](http://hub.eaccessplus.eu/wiki/Dutch_Guidelines_for_user-friendly_payment_terminals).

88. "Dutch Guidelines for Payment Systems", available at [http://hub.eaccessplus.eu/uploads/a/a1/Dutch\\_Guidelines\\_on\\_payment\\_systems.pdf](http://hub.eaccessplus.eu/uploads/a/a1/Dutch_Guidelines_on_payment_systems.pdf).

89. Id.

- **Physical Accessibility:** Banks need to ensure that as far as possible, there is at least physical accessibility to their branches — which would include building ramps, having wider lifts, and so on. Branches should, even if they cannot be located on the ground floor, at least make reasonable accommodations for the disabled, such as having a person who can assist them up to the branch or come down to meet them. Branches should be organised in an easily navigable manner and there should always be a plan for assistance in place — interpreters, special staff to assist with filling out of forms, physical assistance, and easily available information in the form of maps, diagrams, bold text explanations, etc. Banks should also focus more on creating avenues for disabled customers to use their services. This would include building usable and user-friendly voice systems, which is currently needed.<sup>90</sup>
- **Technical Solutions:** Today there are many technological solutions to overcome some of the barriers faced by the visually challenged in the area of banking. Finger print identification technology<sup>91</sup> can be effectively explored to allow the use of thumb impressions while operating bank accounts.<sup>92</sup>For example, the XRCVC is in the process of developing a 'thumb print recognition software named as "e-Signs" with the help of CMC Ltd. (a TATA Enterprise) which can be applied across the banking system in partnership with the RBI to process cheques.<sup>93</sup>Most manufacturers now have accessible ATM models and banks must ensure that new ATMs have these models installed, and that old ATMs are retrofitted to become accessible.
- **Promote the growth of banking services for people with disabilities:** State and national governments should encourage opening of bank accounts by the disabled so that any funds or scholarships can be directly transferred into their account as opposed to being given to organisations which may not transfer it to the beneficiaries — this would help curb malpractices. Information on how people with disabilities can open an account — whether joint or single — and the formalities they need to fulfil should be made easily and readily available. This will encourage more people to open accounts for/with the disabled.
- **Adopt accessible formats for disabled customers:** Banks should publish instruction manuals for ATMs as well as banking procedures in accessible formats such as Braille and DAISY. The banks can then take help of various volunteer organisations in producing and distributing the books to the relevant segments of the population. Such materials should also be made available for download, free of cost, on the bank's website.
- **Training and sensitisation:** Banks should not simply train and sensitise their employees and increase awareness of the various kinds of disability and the services to be provided to the disabled, but actively solicit those with special needs and make it clear that they "understand their needs" and welcome their business. Banks need to consider whether it

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90. Building User Friendly Voice Systems, Tim Noonan, available at <http://www.timnoonan.com.au/ivrpap98.htm>.

91. See generally, "What are the possibilities", the webpage for the Xavier's Resource Centre for the Visually Challenged, available at [http://www.xrcvc.org/fs\\_alternatives.php](http://www.xrcvc.org/fs_alternatives.php).

92. In countries like Japan, even sighted people use what are known as signature stamps, Hanko and Inkan, instead of actual signatures, for signing of official documents. This is a practice that can also be incorporated by banks.

93. See generally, "What are the possibilities", the webpage for the Xavier's Resource Centre for the Visually Challenged, available at [http://www.xrcvc.org/fs\\_alternatives.php](http://www.xrcvc.org/fs_alternatives.php).

makes sense to have separate or specially prepared paperwork for the disabled to fill out if the regular forms are difficult to read or understand.

- Preferential Treatment: The Ministry of Finance should push for preferential treatment of all persons with disabilities along the same lines as the special rates of interest provided to the elderly. Public sector banks like the State Bank of India have a massive network and such visible and actively advertised preferential treatment will spread awareness not only at the bank level but in society as well. This will really encourage family members of the disabled to help them set up bank accounts and will foster independence.
- “Know Your Customer” (KYC) procedures undertaken by banks should be clarified and made simpler — a one-time verification should take place rather than repeated calls, visits, questions, clarifications and summons to the office or branch.
- Bank managers and staff should be proactive and watchful enough to monitor and check for abuse of power by those who are 'assisting' or administering the property and money of the disabled, who are even more susceptible to fraud than the average account holder, and therefore should be provided with stronger anti-fraud/theft services, such as more frequent SMS or email alerts for transactions.

The most important aspect<sup>94</sup> that financial service providers need to understand is that accessibility does not mean providing ramps — goes much beyond and the financial service providers do not currently understand the variety of disabilities and the issues which are tied to each kind of disability. Consider ATMs —the way they are currently designed, the machines are too high for users who are in a wheelchair and the doors themselves are inaccessible to the orthopedically challenged; ATMs have neither voice support nor compatible software for the visually challenged. Thus, a basic and fundamental change in the way banks is catering to the customers’ needs to take place.

Financial service providers should be more encouraging and should engage in outreach to make it easier and more attractive for those with less capability to open and operate accounts with their parents or guardians. Financial independence and control should be offered and facilitated to the maximum extent possible.

Accessibility should not be treated as a corporate social responsibility measure by the large banks and financial corporations, but as a responsibility to be fulfilled regardless of anything else. Further, public sector banks have the biggest responsibility to implement these measures — while they employ people with disabilities because they have a reservation<sup>95</sup> for them, their

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94. In conversation with Ms. Anubhuti Mittal, who works for HR Solutions for the Differently Abled, and runs a consultancy which works with people with disabilities, providing recruitment services to the disabled, doing access audits, job mapping, sensitisation and training of employees at organisations

95. Pursuant to Section 33 of the PWD Act, which states: Every appropriate Government shall appoint in every establishment such percentage of vacancies not less than three per cent for persons or class of persons with disability of which one per cent. each shall be reserved for persons suffering from-

(i) Blindness or low vision;

(ii) Bearing impairment;

(iii) Loco motor disability or cerebral palsy, in the posts identified for each disability:

Provided that the appropriate Government may, having regard to the type of work carried on in any department or establishment, by notification subject to such conditions, if any, as may be specified in such notification, exempt any establishment from the provisions of this section.

services are not accessible to their own employees! There needs to be an effort made to ensure that the internal banking software which is used is accessible for people with disabilities and can be accessed by them using the appropriate assistive technology like screen readers.

Financial service providers should tailor accessibility solutions to address each kind of disability and the range of problems faced by the persons affected by them; they should look at best practices from around the world and implement solutions on their own steam instead of minimum compliance with the government or RBI requirements. Ultimately, making financial services more accessible will only mean that their customer base will grow. Change needs to be top-down — rules and regulations first, then training, sensitisation, and then infrastructure. Schemes and offers should be put in place to attract the disabled as customers, assure them of good and competent service without discrimination, and incentives to invest or save (by offering special schemes such as those which currently exist for women and the elderly).

Building such systems would involve learning more about the customers and their particular situations and needs, and banks can take the help of various organisations that work with the disabled in order to get a better understanding of what they need to deliver. While there are some voluntary standards that can be used as a guide,<sup>96</sup> the most important aspect is to keep the basics in mind: simple and clear language, audible scripts, easy and non-confusing navigation and instructions and the ability to speak to someone in case of an error; these are all elements that will go a long way in ensuring that disabled customers are more equipped to use the financial services offered by a bank.

It would be helpful if there was a monitoring or evaluating mechanism to see how far banks are complying with the standards or guidelines that have been set forth before them. There needs to be a comparative study about how far, for example, the bank websites are compliant with the WCAG Guidelines on Web Accessibility or how easy it is for people with disabilities to access the bank counters and ATMs in different branches. Such a study would give good empirical evidence and serve as the starting point for improvement on the current scenario.<sup>97</sup>

## 9. Bibliography

- “Barriers to Using Automatic Teller Machines”, Tim Noonan, available at [http://www.hreoc.gov.au/disability\\_rights/inquiries/ecom/atmpaper.htm](http://www.hreoc.gov.au/disability_rights/inquiries/ecom/atmpaper.htm).
- “Guidelines for Accessible and Usable Web Sites: Observing Users Who Work with Screen Readers”, Mary Theofranos and Janice Redish, available at <http://redish.net/content/papers/interactions.html>.

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96. For example, the Australian and New Zealand Standard (AS/NZS 4263).

97. A good reference point would be “A Look at Internet Banking Accessibility in Australia”, Sofia Celic, Steven Faulkner, and Andrew Arch, available at <http://ausweb.scu.edu.au/aw04/papers/refereed/celic/paper.html>, where the authors have studied the websites of different Australian banks to see how far they are complying with the WCAG1.0 guidelines and have rated them on different criteria. Unfortunately, the team found that “the overall status of the accessibility of Australian banking web sites, using the accessibility of their home pages as an indicator, is less than desirable. None of the banks assessed has met the ABA recommended timetable of addressing all applicable WCAG 1.0 Priority 1 and Priority 2 checkpoints within 18 months of the Standard being released (April 2002).”

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- John Gill, “The Markets for the Adaptation of Self Service Terminals to be Accessible by People with Disabilities”, available at [http://europa.eu/information\\_society/activities/einclusion/docs/worshop\\_atm/atm\\_markets\\_report.doc](http://europa.eu/information_society/activities/einclusion/docs/worshop_atm/atm_markets_report.doc)
- Carolyn Samuel, “Making Bank Notes Accessible for Canadians Living with Blindness or Low Vision”, available at <http://www.bankofcanada.ca/wp-content/uploads/2011/08/samuel.pdf>.

## 10. Glossary of Terms

- ABA - Australian Bankers’ Association
- ABM - Automated Banking Machines
- ADA - Americans with Disability Act
- AFA - Access for All
- BRA - Banking Regulation Act
- BT - British Telecom
- CAPTCHA - Completely Automated Public Turing test to tell Computers and Humans Apart
- DDA - The Disability Discrimination Act (Australia)
- EFTPOS - Electronic Funds Transfer at Point of Sale
- HREOC - Human Rights and Equal Opportunity Commission
- HTML - Hyper Text Markup Language
- IBA - Indian Banks’ Association
- IVR - Interactive Voice Response
- NIC - National Informatics Centre
- PIN - Personal Identification Number
- PWD - People with Disabilities
- PWDA - The People with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995
- RBI - Reserve Bank of India
- RTF - Rich Text Format
- TTS - Text to Speech
- UNCRPD - United Nations Convention on Persons with Disabilities
- WCAG - Web Content Accessibility Guidelines
- XRCVC - Xavier’s Resource Centre for the Visually Challenged