



# ACCESSIBILITY

Accessibility is a term that is often used when talking about persons with disabilities. This section looks at what accessibility is; its benefits, and how best to make services, systems, and the environment user-friendly for persons with disabilities through CBID.

## Definition of accessibility

Accessibility can be defined as the "ability to use" the functionality, and possible benefit, of some system or entity. It is used to describe the degree to which an object, service, system, or environment can be readily used by as many people as possible. Areas of accessibility are:

- **Environment:** This relates to physical access to buildings, external infrastructure (such as pavements, roads and footpaths). Although often seen only as an issue for persons with **mobility** challenges, good environmental access benefits everyone.
- **Information and communication:** Including sign language interpretation, printed materials including in Braille, tactile, signage, websites and technology. The more accessible and diverse the communication, the more people will be able to use it and benefit from it.
- **Attitudes and behaviour:** This is one of the main elements of exclusion. Current practice still too often includes pity, hostility, fear and being patronizing, with negative messages being reinforced by arts and media images and representation.
- **Systems:** For example, the education system, local government, legal system, health, and politics, all of which can control the level of opportunity for persons with disabilities to participate in society.
- **Economic:** Economic accessibility, or affordability relates to people's ability to pay for services without financial hardship. The close relationship of disability and poverty means that persons with disabilities frequently lack economic access to services they require.



## Accessibility within the UN CRPD

The UN CRPD, which provides a good basis for complying with obligations relating to accessibility. Article 9 of the UN CRPD reads:

**Accessibility:** *To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia:*

- a) buildings, roads, transportation and other indoor and outdoor facilities, including schools, housing, medical facilities, and workplaces;*
- b) Information, communications and other services, including electronic services and emergency services.*

## Accessibility to promote disability-inclusive development

Accessibility must be considered as an investment in infrastructures and practices that benefit all, and which contributes to inclusive, sustainable and equitable development. Where international development supports the development of infrastructure and the building of, for example, health and education systems, it provides a real opportunity to ensure accessibility for persons with disabilities from the start.

Negative attitudes and behaviour restrict the access of persons with disabilities to creating friendships and relationships, accessing family and community activities such as weddings, funerals and initiations. When we start to break these down, we create more positive will to address other accessibility challenges.

A barrier-free environment is critical to achieving equal and full participation hence a key contributor to the social inclusion of persons with disabilities. Everyone benefits from accessibility including for example, older persons, people with children or carrying heavy loads, and people in a temporary situation of reduced mobility.

***Handicap International (2009) in their publication ‘How to design and promote an environment accessible to all?’ outlines seven key components of accessibility programmes as follows:***

***1. Information, awareness-raising and advocacy work*** - *The different international, national and/or local partners, and in particular the decision-makers, institutions and organizations responsible for defining development strategies and implementing them in operational terms, recognize accessibility as a theme which must be taken into account in any project related to area planning. Organizations working in the field of disability have improved capacities in designing and managing advocacy projects on accessibility. There is a network of disabled people’s organizations who jointly organize awareness-raising and advocacy actions.*

**2. Stakeholder training** - The national and/or local construction and area planning stakeholders are trained in accessibility techniques.

**3. Sharing good practices** - Local, national and international good practices on accessibility are identified, compiled and published so they can be reproduced as widely as possible.

**4. Improving / implementing laws and technical standards** - The various local and national legal texts (laws, decrees, technical standards) have been improved and a policy drawn up to ensure the effective application of these texts.

**5. Carrying out work to create examples of improved accessibility** - Work to improve accessibility is undertaken to create models which can be reproduced on a larger scale by local stakeholders.

**6. Carrying out local diagnosis** - The accessibility diagnosis [audit] is used to assess the barriers to mobility in a given space.

**7. Developing local plans to improve the accessibility of existing structures** - The local authorities, the disabled people's organizations and other representatives of civil society define and implement in a concerted manner, a local plan for work to improve accessibility in the existing environment.

## Accessible design

The concept of accessible design covers both "direct access" (i.e. unassisted) and "indirect access" meaning compatibility with a person's assistive technology (such as a computer screen reader). Accessibility is strongly related to universal design, which is the process of creating products that can be used by people with the widest possible range of abilities, operating within the widest possible range of situations. Another dimension of accessibility is the ability to access information and services by minimizing the barriers of distance and cost as well as the usability of the interface. In many countries this has led to initiatives, laws and regulations that aim toward providing universal access to the internet and to phone systems at reasonable cost to citizens.

The disability rights movement advocates equal access to social, political, and economic life which includes not only physical access but access to the same tools, services, organizations and facilities as others.

## What is universal design?



'Universal design' means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design. 'Universal design' does not exclude assistive devices for particular groups of persons with disabilities where this is needed.

There are seven commonly recognized principles of universal design as outlined below. These were originally developed in 1997 by a working group of architects, product designers, engineers and environmental design researchers in the University of North Carolina, USA. Examples of universal design products include ramps, drinking straws, Velcro (an easy to use fabric fastening system), automatic doors, spoons, and audio books. The picture and table below demonstrate the seven principles of universal design.



**Principle 1: Equitable use:** Design that is useful and marketable to persons with diverse abilities. For example, a building should have one main entrance which is suitable for everyone. If this is not possible any alternative entrance should be equal in terms of privacy, security, safety and convenience.

**Principle 2: Flexibility in use:** Design that accommodates a wide range of individual preferences and abilities. An example might be counters in a bank positioned at different heights so that people in either a standing or sitting position can access them easily.

**Principle 3: Simple and intuitive use:** Design that is easy to understand, regardless of the user's experience, knowledge, language skills, or concentration level. For example, being able to see easily how taps in a washroom work.

**Principle 4: Perceptible information:** Design that communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. This means that essential information should be provided in a variety of modes such as written, symbolic, tactile, verbal.

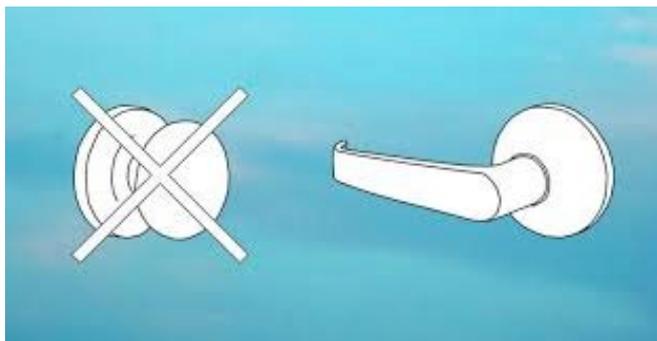
**Principle 5: Tolerance for error:** Design that minimises hazards and the adverse consequences of accidental or unintended actions. For example the ‘undo’ button on a computer that allows you to go back after making a mistake or series of mistakes.

**Principle 6: Low physical effort:** Design that can be used efficiently and comfortably and with a minimum of fatigue. For example a door handle rather than a knob – which is easier to use for someone with limited grip or strength.

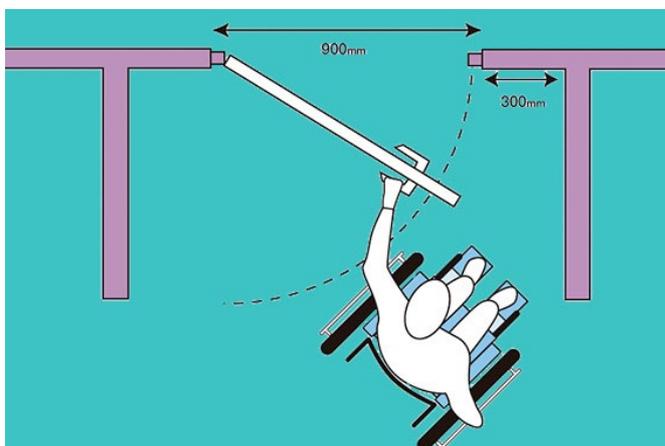
**Principle 7: Size and space for approach and use:** Design that provides appropriate size and space for approach, reach, manipulation, and use regardless of the user’s body size, posture or mobility. An example is extra space within a toilet cubicle to allow access for a wheelchair user.

## Examples of universal design

The design on the left in the image below can be difficult for some people to use as it requires the ability to grip. The design on the right is more flexible as it can be levered in many different ways.



In the image below, sufficient space has been left next to the door opening for the wheelchair user to reach the door handle when the door is closed and to open the door. The width of the doorway is also sufficiently wide for the wheelchair user’s wheelchair.



## What is reasonable accommodation?

Reasonable accommodation is defined in the UN CRPD as *necessary and appropriate modification and adjustments, not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.*

Some key concepts in the definition of reasonable accommodation include:

**Necessary:** Reasonable accommodation is not about fulfilling the personal preferences or whims of persons with disabilities; it is about providing what is required to ensure that they can join in on an equal basis with others.

**Appropriate:** Reasonable accommodation is about doing what is needed to ensure that persons with disabilities can participate on an equal basis with others. For example, if you renovate your premises, putting in a ramp is a reasonable accommodation.

**Modification and adjustments:** Reasonable accommodation is about making changes to what you are doing already. If an organisation has premises, services, programmes and activities which are fully accessible to persons with disabilities, and which they can use on a basis of equality with others, you may well not need to provide extra reasonable accommodations.

**Disproportionate or undue burden:** No-one has to provide reasonable accommodations that would bankrupt them. Big or wealthy organizations are expected to be able to provide more than small or poor ones. But most reasonable accommodations cost little or nothing and can be simply applied.

Examples of accessibility standards:

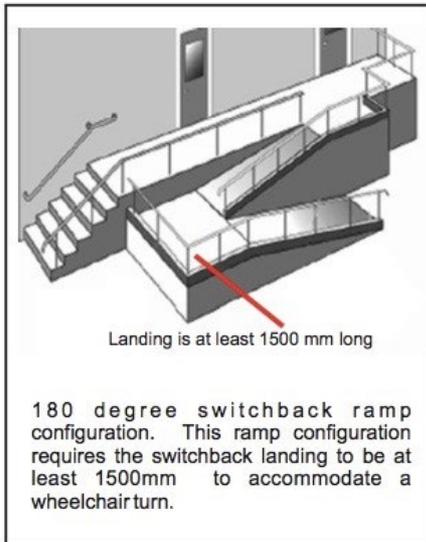
- Ramps
- Door/entry width
- In house circulation
- Tactile markings
- Audio support
- Lifts
- Height of counters
- Display fonts

Some examples of accessibility standards are given below<sup>1</sup>:

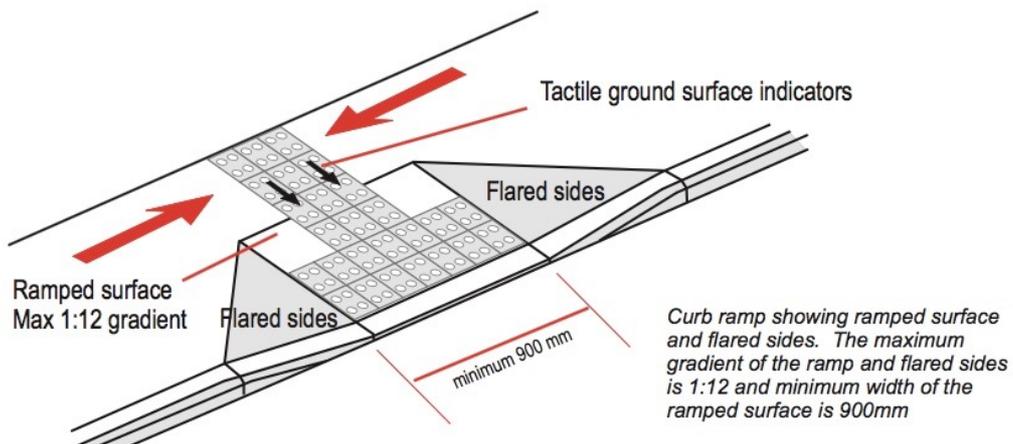
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<sup>1</sup> Design\_considerations\_for\_accessibility USAID, John Grooms, Motivation 2006

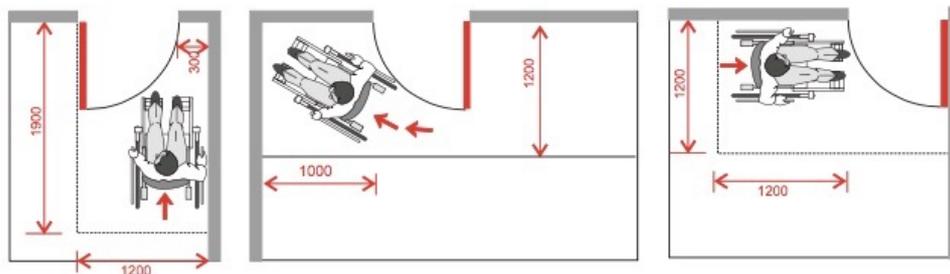
## Ramps



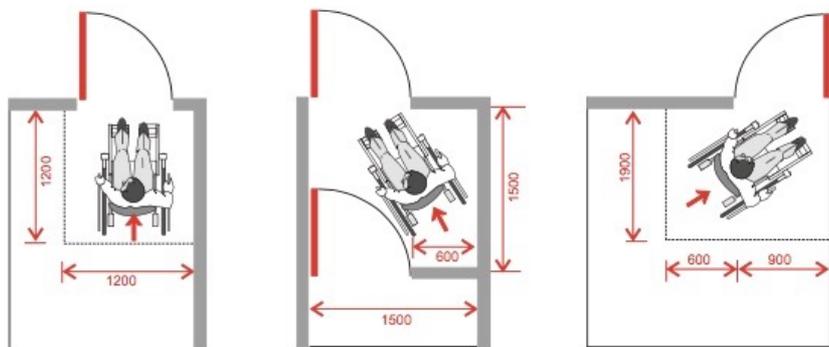
## DESIGN CONSIDERATIONS



## Door openings



Space requirements for doors opening towards the direction of approach



Space requirements for doors opening away from the direction of approach

## How to do a disability access audit

Disability proofing/auditing is a cost-efficient way of appraising an existing or planned project, programme, activity, communication system, building or service to assess the level to which they may exclude persons with disabilities or put them at a disadvantage. It involves identifying barriers to access and to finding solutions. The following write up draws on a resource document from ZAFOD (Zambia Federation of Disability Organizations) and outlines the main steps in conducting a disability accessibility audit.

### **Pre- audit activities**

*There are a number of activities that ought to be undertaken before the actual audit. A successful and effective access and accessibility audit will be one that has been properly thought through and well planned. Planning should start ahead of the date of the audit day and planners need to consider and respond to a wide range of key issues. The following should be prepared before the actual audit is carried out.*

### **Select places to be audited**

*There is a need to have a list of places that need to be audited. These may be public buildings or premises. They may also be private enterprises or privately owned buildings that are open to the public. The auditors need to identify these buildings beforehand.*

### **Writing letters to seek audit permission**

*Before the actual audit and after buildings to be audited have been identified, there is need to write to the owners of the building or premises that you intend to audit. A letter/letters must be written to seek permission from the owners of the premises that you wish to audit. These letters must be sent in good time to give the owners of the building time to be ready for this activity, i.e. fit it into their programme. A month at the most is sufficient time for notification. The permission letter gives the owner of the building an idea of what an access audit is, its importance and how it will benefit both the persons with disabilities and the building owner. The letter must be accompanied with an audit timetable/schedule indicating the date and time of the audit.*

### **Selection of audit team**

*The audit team must consist of persons who reflect a sample of people who experience access barriers. And to promote equal representative of disability you will be using a person who:*

- *has a physical disability with a mobility-based need for equal access*
- *is an older person (senior citizen) with an age-related mobility-based need for access*
- *uses a non-motorised wheelchair and does not require a permanent helper (e.g. paraplegia)*
- *uses a motorised wheelchair and requires a permanent helper (e.g. quadriplegia or tetraplegia)*
- *has a temporary disability / incapacity (using crutches / while heavily pregnant)*
- *non-disabled person.*

*The persons selected to take part in the audit must be able to read, write and speak the language that is used in the area or place of audit and must be able to appropriately answer any questions that may be asked by the building owner or any interested person as the audit is being conducted.*

### **Audit training and sensitization**

*After selection the audit team, training on access auditing must be conducted. This will help the team have a better understanding of what an audit is and what they are going to do. The training will also give the team an opportunity to ask questions and get clarifications on what is required of them. The team should also be prepared to answer questions appropriately when they are asked during the audit. Questions such as:*

- *Those concerning the purpose and intention of the audit*
- *Those on the background of the audit*
- *How it will benefit the building owner and persons with disabilities and the public.*

### **Budgeting for an access audit**

- **Equipment** *needed for the audit: This may only need to be budgeted for once as the same equipment can be used in all audits that may be conducted or need to be conducted.*
- **Transportation:** *Accessible transport is obviously essential and needs to be budgeted for. Consideration should be made of the transport that you are going to use such as ensuring that it will accommodate all the auditors and that it is suitable for the categories of disability in the audit team.*
- **Stationery:** *Printing of checklists and audit reports need to be budgeted for. All costs associated with stationery must be taken into account.*

- **The media:** This is important as people need to be sensitized on issues of accessibility and the most effective way to reach out to the people is through the media. Using the media can also help us reach out to service providers who may endeavour to make adjustments to their environments and the way they provide their services thereby making them accessible to persons with disabilities. Have a journalist cover your audit for advocacy purposes. A representative from radio, television and print media should be catered for in the budget. The other alternative is to cost in a freelance journalist who can develop a specific programme for the Access auditors.
- Refreshment, allowances and accommodation for the audit team must all be budgeted for when undertaking an access audit.

### **Equipment needed for an audit**

You will need the following equipment to conduct an access audit:

- Flexible steel measuring tapes
- Pens/pencils
- Camera
- Copies of the checklists for all auditors
- Gradient measure
- Door pressure gauge.

### **Carrying out the audit**

- A walk and talk appraisal in the company of the building owner is mostly preferred in that it allows the audit team to discuss with the building owner the main positive and negative features of the premises while at the same time demonstrate the ease or difficulty of accessing the premises.
- A report to present findings and feedback is easily understood by the client if they were involved in the audit process from the beginning

### **Follow up on the letters**

You will need to follow up the letters you wrote to seek permission from the building owners of the premises you intend to audit. There must be confirmation of permission to carry on with the audit. Those that may have confirmed by writing back to you will also need to be reminded before the actual audit date. A week before is good time to do so.

### **Access audit ethics**

- Arrive at the place of audit a few minutes before the actual audit time
- Avoid disturbing the clients or avoid inconveniencing the business of the premises
- Dress modestly - there is a lot of activity/bending during the audit, ensure you dress comfortably
- Carry permission letters in your file
- All checklists must be in folders for each auditor
- Be polite to people / anyone who approaches you with questions at the audit
- If you are stopped from auditing by any person "stop immediately" - do not argue with the person. Explain to them what you are doing and if they insist stop and call your team leader. The team leader must then come and talk to the person and explain that permission was sought.
- When offered drinks or anything to eat, you can accept but that should not interfere with you audit and the report.
- Accurate measurements
- Never steal - emphasize this to the team
- Do not ask the escorting officer or one passing by or client to assist you with your work
- Give only official phone numbers as you do audits on an official basis.

In order to write a report of the access audit conducted, you will need to refer to the checklists in which the findings were recorded. The report will have all the sections that are found in the checklist for you to report on what the actual findings of the premises audited were. After filing in all the sections with the findings, you will then give recommendations for adjustments in accordance with the findings. For example if a building has no toilet designed for the needs of persons with disabilities, you will need to give the recommendations on how an accessible toilet should be. The report will need to have information or findings of all places audited:

- The car parks / parking bays

- Entrances and doors
- Circulation space in all areas audited
- The stairs
- Corridors
- Counters, tables
- Seating along the reception
- The displays
- The classrooms
- Hostels
- Including all other features that you would have audited.

Depending on the different areas audited and their findings you will make the required recommendations that will enhance accessibility to persons with disabilities to a particular place. For example an accessible toilet should be as follows:

#### **Toilets**

- 1.5 x 2 meters minimum wall dimensions
- sign posted with a disability symbol
- have outward opening doors
- emergency assistance alarm/button fitted with a cord, visual & audio alarm
- suitable grab rails that are not too cold to the touch fixed on both sides of the pan
- flush button that is not higher than 1000mm from the floor & fully accessible
- low-level urinal in men's toilet
- are the taps easy to operate or fitted with lever action
- basins wall mounted without legs with a clearance of 650mm to the floor wash basins/sinks fitted no higher than 830mm to the top edge & fixed so as to be used from the toilet pan.

#### **Submission of the report**

A written report should be submitted to the relevant owners and a copy kept for your file.

#### **Follow up**

Having submitted the report to the different owners of the different premises or buildings audited, there is need to make follow up to see whether there are steps being taken towards the recommendations submitted. Follow up steps can be made six months after submission of the reports. Other owners may make contact for the purpose of having you explain certain aspects of the report that they may not be clear on. You then need to make time to meet with them as soon as you can so that they are clear on what they need to do to ensure that their premises are accessible to persons with disabilities.

A book related to Handicap International's work in carrying out disability accessibility audits can be found here:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/AccessibilityAudit\\_PG13.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/AccessibilityAudit_PG13.pdf)

## Accessibility checklist

Design feature	Observations
Car park	
Ramps (slope and surface)	
Doors and doorways	
Thresholds	
Corridors/pathways	
Surfaces	
Toilets	
Handrails	
Stairs	
Landings	
Tactile markings	
Audio support	
Lifts (elevators)	
Height of counters/reception desks	
Display font size	
Overhead obstructions	

## Sources

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