



“PHYSICAL ACCESSIBILITY- INFRASTRUCTURE TRAINING MANUAL”

Prepared by:



Supported by:



Contents

List of acronyms	1
GENERAL INFORMATION.....	2
SECTION 1: Foreword.....	6
1.1 Why this manual?	6
1.2 Relation with the technical standards	6
1.3 How to use this manual.....	7
SECTION 2: Disability and Accessibility	8
2.1 National and International framework.....	8
2.1.1 Sustainable Development Goals	8
2.1.2 Convention on the rights of persons with disabilities	9
2.1.3 The Incheon Strategy	11
2.1.4 The Law on the Protection and the Promotion of the Rights of Persons with Disability	12
2.1.5 Technical Standards on Physical Accessibility- Infrastructure for Persons with Disabilities	13
2.2 How to promote accessibility?	13
2.2.1 Active participation of people with disabilities.....	13
2.2.2 Information and awareness-raising	14
2.2.3 Planning.....	15
2.2.4 Training	15
2.2.5 Monitoring.....	16
2.2.6 Awards to individuals and legal entities for well-executed constructions and/or modifications.....	17
2.3 What is an “impairment”?.....	17
2.4 What is a “disability”?	17

2.5	What is “accessibility”?	19
2.6	Main definition and concepts	20
2.6.1	Reasonable Accommodation	20
2.6.2	Universal design	22
2.6.3	How to make a built environment accessible through the RECU principle	28
2.6.4	The links between Accessibility, Reasonable Accommodation, Universal Design, and the RECU principle	29
2.7	Accessibility barriers and examples of responses to address them	30
2.7.1	Type of Barriers	30
2.7.2	Responses to reduce accessibility barriers	36
2.8	Why accessibility is important? Access benefits all	40

SECTION 3: Presentation of Technical Standards on Physical

	Accessibility-Infrastructure for Persons with Disabilities	42
3.1	What are the technical standards for?	42
3.2	Who must follow the standards?	43
3.3	How are the Technical Standards on Physical Accessibility - Infrastructure for Persons with Disabilities structured?	43
3.3.1	About the Cover	43
3.3.2	About Inter-Ministerial Prakas	44
3.3.3	About the Working Group	45
3.3.4	About the contents’ table	46
3.3.5	About the chapters	46
3.3.6	About Glossary	46
3.3.7	About the Printing	46

List of acronyms

ATM	Automated Teller Machine
CIP	Commune Investment Plan
CRPD	Convention on the Rights of Persons with Disabilities
CSDGs	Cambodia Sustainable Development Goals
DAC	Disability Action Council
DAC-SG	Disability Action Council-Secretariat General
DAC-MI	Disability Action Council – at Ministry/Institution
DAC-MP	Disability Action Council – at Municipal/Provincial
DPOs	Disabled People’s Organizations
GPS	Global Positioning System
ERW	Explosive Remnants of War
HI	Humanity & Inclusion
LPPRPD	Law on the Protection and the Promotion of the Rights of Persons with Disabilities
MoLMUPC	Ministry of Land Management, Urban Planning and Construction
MOSVY	Ministry of Social Affairs Veterans and Youth Rehabilitation
NGOs	Non-Governmental Organizations
NTAA	Non-Technical Accessibility Assessment
RECU	Reach, Enter, Circulate, Use
SDG	Sustainable Development Goals
TV	Television
UN	United Nation

GENERAL INFORMATION

The Disability Action Council (DAC):

The Disability Action Council (DAC) was established by Royal Kram No. NS/RKAM/0709/010, dated 3 July 2009, promulgating the Law on the Protection and Promotion of the Rights of Persons with Disabilities. , The DAC acts as the national coordination and advisory body on disability and rehabilitation and is a cross-sectoral body composed of ministries, institutions, representatives of the private sector, NGOs and representatives of persons with disabilities. The Disability Action Council has municipal and provincial representatives:

The General Secretariat of the Disability Action Council (DAC-SG) is a public institution established by Sub-Decree No. 216 ANKr.BK dated 2 May 2013, with the responsibilities to provide technical advice on disability issues; develop the National Disability Strategic Plan; promote the implementation of policies, laws, strategic plans, legal documents, and international instruments related to disability issues; monitor their implementation communicate with national and international communities to exchange experiences and mobilize resources; develop reports on the implementation of the CRPD, organize national and international events for persons with disabilities. Presently, DAC-SG is located in building 788 on Monivong Blvd., within the Ministry of Social Affairs, Veterans and Youth Rehabilitation compound.

The Disability Action Council – at Ministry/Institution level (DAC-MI) is a working group established across ministries and institutions to act as focal points and responsible for disability-related works within the sectors and jurisdictions framework of those ministries and institutions.

The Disability Action Council – at Municipal/Provincial level (DAC-MP) refers to groups of DAC representatives at the municipal/provincial level, established by each authority. Each group is a diverse body made of civil society, local authority, representative of private sectors, NGOs, and the representative of persons with disabilities. The Deputy Governor acts as the head of the inter-sector works related to disability issues within the jurisdiction of his/her administrative area.

Handicap International - Humanity & Inclusion (HI):

HI, founded in 1982, is an independent and impartial aid organization working in situations of poverty and exclusion, conflict and disaster. HI works alongside people with disabilities and vulnerable populations, taking action and bearing witness to respond to their essential needs, improve their living conditions, and promote respect for their dignity and fundamental rights.

In 2018, Handicap International's global movement became Humanity & Inclusion. The Federation, which runs projects in around sixty countries, is now working under the operating names of "Humanity & Inclusion", "Handicap International" or "Atlas Logistique". Any document with the letterhead "Humanity & Inclusion" applies de facto to Atlas Logistique and Handicap International teams.

The Accessibility training toolkit has been developed with the involvement of the following persons:

The General Secretariat of the Disability Action Council		Handicap International – Humanity & Inclusion (HI)	
1. H.E. Em Chan Makara	Secretary of state of MoSVY	1. Ms. Edith van Wijngaarden	Country Manager
2. H.E. Ung Sambath	Deputy General Secretariat of DAC	2. Mr. Chor Rada	Technical Support Manager
3. Mr. Chhorn Akhra	Director of Development Disability Services	3. Ms. Erika TRABUCCO	Accessibility Specialist
4. Mr. Sam Polong	Officer-Development Disability Services		
5. Ms. Sor San	Officer-Development Disability Services		

The Accessibility training toolkit addresses three types of audiences:

- 1. The National Trainers:** a group of 15 technical experts from DAC-General Secretariat (DAC-SG), who received their first training in October 2020, refresher training will be provided in 2021.
- 2. The Sub-national trainers:** 21 members from 10 Capital and Provincial Disability Action Council who received the first training (maters trainers training): Phnom Penh, Kampong Speu, Tbong Khmum, Kampong Cham, Prey Veng, Siem Reap, Kampong Chhnang, Battambang and Kratie in October 2020. They also participated in the planned refresher, or supplementary, training of 2021.
- 3. The Implementers:** individuals and legal entities, from the public and private sectors, at the national and sub-national levels throughout the country, who are obligated to implement the Ministry of Land Management, Urban Planning and Construction and the Ministry of Social Affairs, Veterans and Youth Rehabilitation' Inter-Ministerial Prakas No. 248 on the “Technical Standards on Physical Accessibility-Infrastructure for Persons with Disabilities ” dated 28 November 2018 and other relevant legal documents.

Target audience: the training toolkit can be used as a quick guide for a broad range of specific audiences including, but not limited to:

NATIONAL & SUB-NATIONAL TRAINERS

- ▶ Officers from the General Secretariat of the Disability Action Council;
- ▶ The representative from the Disability Action Council – at Municipal/Provincial level;
- ▶ Other stakeholders;

IMPLEMENTERS

- ▶ Relevant ministries;
- ▶ Provincial and local authorities;
- ▶ Planning stakeholders, national governors, policymakers at the development and policy level;

- ▶ Construction developers, construction owners, architects, engineers, and designers
- ▶ Universities (Department of Architecture and Engineering);
- ▶ Construction contractors and builders;
- ▶ Non-Governmental Organizations (NGOs) and Disabled People Organizations (DPOs);
- ▶ Associations of Persons with Disabilities;
- ▶ Private Sectors;
- ▶ Service providers;
- ▶ Users with or without disabilities;
- ▶ Obligated persons and legal entities;

The practical guide ‘Accessibility training toolkit’ consists of five parts:

1. A training manual (for IMPLEMENTERS) including the relevant general, technical, and methodological elements to understand and use the technical standards.
2. A presentation (to be used by the TRAINERS) highlighting a selection of the content of the manual.
3. A physical accessibility assessment tool with instructions, to be used by the IMPLEMENTERS after the training to assess the compliance of projects and buildings to the guidelines.
4. A facilitator guide (for the TRAINERS), with tips on how to deliver the training
5. Thematic factsheet of the guidelines (for TRAINERS AND IMPLEMENTERS)

SECTION 1: Foreword

1.1 Why this manual?

This Accessibility Training Manual is the first component of the Accessibility Training Toolkit and it serves to promote understanding and knowledge about the Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities. It is part of the accessibility training toolkit that provides conceptual and practical guidance for a broad range of target audiences in charge of creating and maintaining the urban and built environment in compliance with the Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities. It also aims to support national and international stakeholders to use and implement the technical standards allowing enhancing the rights of people with disabilities to a barrier-free environment. This training manual has been developed by HI Cambodia for the use by the Disability Action Council (DAC) representatives (as the TRAINERS) to train various actors in charge of the enforcement of the Cambodian national accessibility standards (as the IMPLEMENTERS). Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities have been drafted by the DAC and HI and the section focusing on Accessibility of the Environment has been officially endorsed in 2018. However, they have not been promoted and few are aware of their existence and even fewer about their content.

1.2 Relation with the technical standards

The manual serves as an explanation and clarification of the technical standards on physical accessibility – infrastructure for persons with disabilities, it does not replace them. Users always have to refer to the standards to complete an understanding of the adopted standards.

1.3 How to use this manual

The training manual is a collection of information, definitions, concepts, best practices, examples of mistakes in accessibility designs, and other recommendations.

By reading this manual you will get a better insight into the general key concepts of accessibility, the definition of disability, the type of barriers, and then linking with accessibility. The contents of the training manual will support and complement the Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities. This means that you can use the content of this manual when implementing other activities that are part of this toolkit, such as awareness sessions, training sessions, hands-on building construction or reconstruction; at the same time, some of the elements of the toolkit will support you to follow the recommendations given in this manual (such as the tools for trainers), including the relevant general, technical and methodological elements to understand and use the technical standards.

In this manual we will refer to the Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities as “The standards”

SECTION 2: Disability and Accessibility

2.1 National and International framework

Accessibility is a broad term and is understood in many different ways. Accessibility is an obligation under international and national frameworks such as the SDGs of Agenda 2030, the CRPD (Article 9), the Incheon Strategy to “Make the Right Real” for persons with disabilities in Asia and the Pacific of 2012 (3rd Goal) and the Cambodia disability law (Article 21 and 26).

2.1.1 Sustainable Development Goals

On 1st January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development came into effect.

The SDGs build on the successes of the Millennium Development Goals. They are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace, and justice. Although the SDGs are not legally binding, governments are expected to take the lead and put in place national frameworks to achieve the 17 goals. In September 2015, the Royal Government came together with all UN member States at the annual session of the General assembly to endorse the expanded and more ambitious agenda set out by the SDGs 2016-2030. The Royal Government has sought again to adapt these global goals to the national context and craft a fully localized set of targets - the Cambodia SDGs, or CSDGs – which will feed into national and sectoral development planning processes, and this document sets out the CSDG framework as a primary input to the National Strategic Development Plan 2019-2023. Cambodia added on additional Goal: CSDG 18 on a Mine/ERW Free Cambodia to end the negative impact of Mine/ERW and promote victim assistance. The accessibility

component is covered under various SDGs but in particular SDG 11 on Sustainable Cities and Communities to make Cities, and Human Settlements inclusive, safe, resilient and sustainable.



SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

2.1.2 Convention on the rights of persons with disabilities

Article 31 of the Constitution of the Kingdom of Cambodia states that the Kingdom of Cambodia recognizes and respects human rights as enshrined in the United Nations Charter, the Universal Declaration of Human Rights, and its conventions and conventions on human rights, women’s rights, and Children’s rights. Separately, Article 74 states that the state supports the persons with disabilities and the families of the soldiers who sacrificed their lives for the nation.

Khmer citizens have equal rights by the law, have all the same rights, freedoms, and duties, regardless of race, color, sex, language, creed, religion, political affiliation, national origin, social status, resources, or another status. The exercise of this right shall be following the conditions prescribed by law. The Kingdom of Cambodia signs the Convention on the Rights of Persons with Disabilities (CRPD) and Additional Protocols on 1 October 2007 by H.E. Hor Namhong, Deputy Prime Minister and Minister of Foreign Affairs and International Cooperation. On July 26, 2011, the MoSVY issued an order establishing a technical working group composed of the DAC, the Office of the High Commissioner for Human Rights in Cambodia, the Cambodian Human Rights Committee, development agencies, organizations, and stakeholders to process ratification documents. On April 27, 2012, the Plenary Meeting of The Council of Ministers under the high

presidency of Samdech Akka Moha Sena Padei Techo Hun Sen, Prime Minister of the Kingdom of Cambodia has agreed and decided to send the documents of the Convention to the legislature. On August 10, 2012, the National Assembly of the Kingdom of Cambodia opened its 8th plenary session of the 4th legislature under the high presidency of Samdech Akka Moha Ponhea Chakrei Heng Samrin, President of the National Assembly, and unanimously agreed to allow the Kingdom of Cambodia to become a state party to this Convention by a vote of 81 to 81. On September 5, 2012, in the plenary session of the Senate, it was unanimously decided. And on September 20, 2012, His Majesty King Norodom Sihamoni, King of the Kingdom of Cambodia, has signed a law authorizing the Kingdom of Cambodia to become a state party to the Convention on the Rights of Persons with Disabilities. On December 20, 2012, the Royal Government ratified the CRPD and on January 9, 2013, the Kingdom of Cambodia received a letter from the United Nations stating that Cambodia has become a State Party to the CRPD. The CRPD in Article 9 sets out the measures taken by States Parties on Facilitation of Persons with Disabilities in Physical Environment, means of transportation and means of communication.

In Article 9: Accessibility, The Convention sets out the obligations of the States Parties on accessibility as below:

1. To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to 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 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.

2. States Parties shall also take appropriate measures:
- (a) To develop, promulgate and monitor the implementation of minimum standards and guidelines for the accessibility of facilities and services open or provided to the public;
 - (b) To ensure that private entities that offer facilities and services which are open or provided to the public take into account all aspects of accessibility for persons with disabilities;
 - (c) To provide training for stakeholders on accessibility issues facing persons with disabilities;
 - (d) To provide in buildings and other facilities open to the public signage in Braille and in easy to read and understand forms;
 - (e) To provide forms of live assistance and intermediaries, including guides, readers, and professional sign language interpreters, to facilitate accessibility to buildings and other facilities open to the public;
 - (f) To promote other appropriate forms of assistance and support to persons with disabilities to ensure their access to information;
 - (g) To promote access for persons with disabilities to new information and communications technologies and systems, including the Internet;
 - (h) To promote the design, development, production, and distribution of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost.

2.1.3 The Incheon Strategy

The Incheon Strategy to “Make the Right Real” for persons with disabilities in Asia and the Pacific is composed of 10 goals in total. Accessibility is mentioned in the 3rd goal:

Enhance access to the physical environment, public transportation, knowledge, information, and communication. Access to the physical environment, public transportation, knowledge, information, and communication is a precondition for persons with disabilities to fulfill their rights in an inclusive society. The accessibility of urban, rural,

and remote areas based on universal design increases safety and ease of use not only for persons with disabilities but also for all other members of society. Access audits are an important means of ensuring accessibility and must cover all stages of the process of planning, design, construction, maintenance and monitoring, and evaluation. Access to assistive devices and related support services is also a precondition for persons with disabilities to optimize their level of independence in daily life and live in dignity. Ensuring the availability of assistive devices for those living in low resource settings involves encouraging research, development, production, distribution, and maintenance.

2.1.4 The Law on the Protection and the Promotion of the Rights of Persons with Disability

The Law on the Protection and the Promotion of the Rights of Persons with Disability (LPPRPD), has been approved by the National Assembly on 29 May in 2009 and signed by His Majesty King Norodom Sihamoni, King of the Kingdom of Cambodia, and promulgated by Royal Kram No. 0709/010 dated July 3, 2009, This law aims to protect and prevent the rights, freedom, interests of persons with disabilities, reduce and eliminate discrimination, to increase access to services (physical rehabilitation, mental health and livelihood) to ensure persons with disabilities fully participate in society. Chapter 5 of the law provides for access to public places, which means that people with disabilities must be able to access and use the above public places. Besides, Article 23 of the law stipulates that the arrangement of accessibility in public places or on other means of transportation for persons with disabilities shall be determined by an inter-ministerial Prakas of the MoSVY and relevant ministries and institutions, which is the main basis for the development of the standards. Also, Chapter 13 of the law stipulates penalties and fines for individuals and legal entities who own public places that are not designed to be accessible.

The law is currently being revised.

2.1.5 Technical Standards on Physical Accessibility-Infrastructure for Persons with Disabilities

The standards have been developed based on the obligations of the CRPD and the LPPRPD. They focus on an actual situation in Cambodia: the vibrant sector of construction of buildings and infrastructures. However, buildings and infrastructures are mostly designed by people with little knowledge about accessibility and the needs of persons with disabilities. Recognizing these needs, the General Secretariat of the DAC cooperated with the Ministry of Land Management, Urban Planning and Construction (MoLMUPC), and other relevant partners to study, research, and develop the standards in more than two years, based on the first draft submitted by DAC and HI. This technical standard has been officially endorsed by an inter-ministerial Prakas between the MoSVY, and the MoLMUPC on the 28th of November 2018. These standards were officially presented during a workshop organized at the MoSVY on Wednesday, September 18, 2019.

2.2 How to promote accessibility?

2.2.1 Active participation of people with disabilities

- ▶ Consult and ensure dialogue with people with disabilities, including disabled peoples organizations (DPOs), self-help groups, community members, including women and children with disabilities, and their family members to understand how the environment and infrastructure affect their ability to reach, enter and move around within and use services and facilities.
- ▶ Ask for their advice when planning any new, or renovating any existing facilities and/or service, so they can easily use them.
- ▶ Ask people with disabilities to get involved in accessibility assessments – ask them to move around the house, community, and environment; use the services and facilities and to tell you what is accessible and what needs to be changed and how.

- ▶ Develop a community-based accessibility ‘task force’ which includes members with different kinds of impairments as well as elderly, children, women, and men to assess and provide recommendations about any infrastructure development in the community.
- ▶ Support people with disabilities and the community to generate awareness about the importance and impact of accessibility, mobilize decision-makers and strategic community members to embrace their responsibility to promote access for all and include the needs of people with disabilities at a sub-national level such as in the Commune Investment Plan (CIP).
- ▶ Creating a barrier-free environment involves a behavior change of community members, planners, implementers, and monitoring organizations to accept that all people have the right to move around freely and use services and facilities. This means also that people with disabilities should feel welcome.

2.2.2 Information and awareness-raising

Target diverse audiences:

- ▶ Civil society, local organizations, national and international NGOs, and political parties during election time to push them to include accessibility into their programs.
- ▶ Professionals or future professionals: architects, engineers, technicians, students, project managers.
- ▶ Decision-makers: national and local authorities who develop and implement accessibility policies.
- ▶ Disseminate information through multiple and accessible mediums e.g. large print, loudspeakers/mikes, simple language, using pictures, using song and drama so that it can be understood by people with hearing impairment, visual impairment, intellectual impairments as well as people who have different levels of literacy.
- ▶ People with different types of disabilities have different needs, so the design or modification of the built environment must take into

account the different types of disabilities (for example, people who use wheelchairs need a slope or lift to go up and down, and people who have a visual impairment need voice and braille information, while people who are deaf need sign language or subtitles to access information and awareness sessions.)

2.2.3 Planning

- ▶ Include accessibility from the planning stage of constructions. Additional costs are estimated at around 2-5% of the total cost. It is a lot more expensive and time-consuming to modify homes, services, and facilities to ensure accessibility after the construction is finalized.
- ▶ At the sub-national level, it is essential to establish a follow-up and monitoring committee with representatives of the 3 main actors (government, service providers, and people with disabilities) within inclusive local development, to follow-up the consideration of accessibility in rehabilitation or constructions.
- ▶ Ensure all design of products/services and infrastructure is accessible and free from barriers.
- ▶ Use accessibility standards and guidelines starting from the planning stage of constructions to ensure that the specifications you use respect recommended measurements to be sure that all buildings or facilities will be safe and comfortable to use for as many people as possible.
- ▶ Adopt, implement and monitor all policies related to accessibility, both disability inclusion policies and specific disability policy such as Royal Decrees, Sub-Decrees, Circulars, Instructions, Notifications, etc. to ensure that builders, approvers, and implementers systematically and routinely consider accessibility.

2.2.4 Training

- ▶ As stated in Article 9, point 2C of the CRPD the State Party shall provide regular training on accessibility to relevant stakeholders: authorities issuing construction licenses, issuers of broadcasting,

IT professionals, engineers, architects, designers, construction foremen, construction workers, urban planners, transportation authorities, all kinds of service providers, community development members, civil society organizations, students, university students, private sectors, and people with all kinds of disabilities, etc. This training should be given not only to designers of goods, services, and products but also to those who make them.

- ▶ Develop a mindset or ideology for everyone about the benefits of building or modifying physical infrastructure accessibility that is convenient for everyone.
- ▶ Incorporate the standards on physical accessibility in curricula at all levels, both training institutions of the public and private sectors.
- ▶ Encourage specific initiatives to develop ‘standard models’ accessible public buildings (e.g. schools, religious buildings...); use this example to advocate for accessibility, to illustrate its impact, and to demonstrate that an accessible environment is possible, affordable, desirable, and beneficial for all.
- ▶ Sensitize staff within all services on how to assist and include people with disabilities.
- ▶ Advise staff to prioritize people with physical disabilities to avoid them standing in long queues.

2.2.5 Monitoring

- ▶ Regularly inspect and audit existing and newly constructed physical infrastructure to make it accessible to all.
- ▶ Monitor the use of services by people with disabilities with disaggregated data collection.
- ▶ Monitor and report on the implementation of national and international legislation addressing accessibility
- ▶ Report positive situations where legislation has been applied and communities benefit from accessing services and environments.

2.2.6 Awards to individuals and legal entities for well-executed constructions and/or modifications

- ▶ Encourage individual persons to actively participate and support accessibility.
- ▶ Provide awards or certificates in various forms to legal entities that perform well on accessibility.

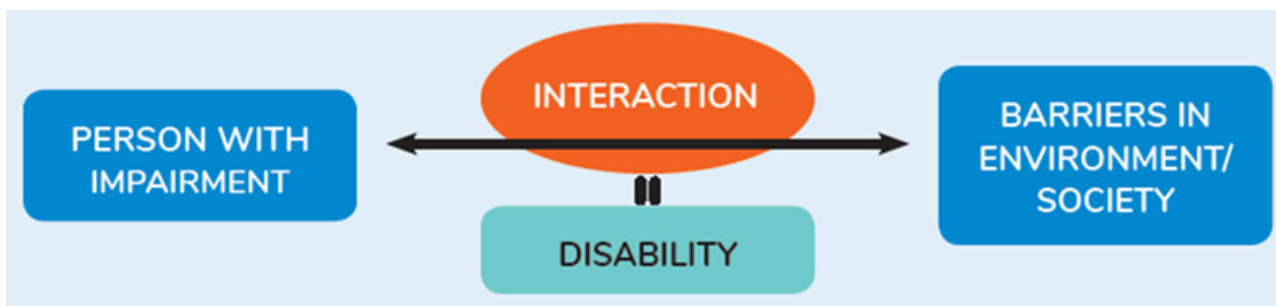
2.3 What is an “impairment”?

Problems in body function [mental functions, sensory functions, voice and speech functions] or body structure [Nervous, Musculoskeletal and Cardiovascular system] such as a significant deviation or loss [i.e. Amputation, club foot, paraplegia, cerebral palsy].¹ Impairments can be temporary or permanent; progressive, regressive or static; intermittent or continuous. Persons with impairments often experience barriers to their participation in education, health, employment, political, and public life.

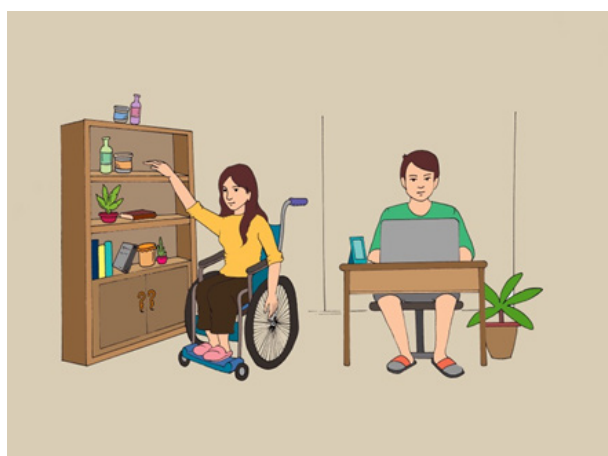
2.4 What is a “disability”?

According to the UN Convention on the Rights of Persons with Disabilities, “Persons with disabilities comprise those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”. This definition means that impairments can become a disability when a person has to face an environmental situation that is not designed to be accessible to him/her. In other terms, a more accessible environment enables persons with impairments to enjoy their rights on an equal basis with others. Impairment-based discrimination has had a particularly severe effect on housing, transport, cultural life, and access to public places and services.

1 International Classification of Functioning, Disability and Health



For example, two people can have the same impairment (e.g. amputated leg) can have different levels of disabilities. If someone who has an amputated leg but uses a prosthetic and has learned to walk with it and whose family has accepted him/her to study and or work, then she/he has a low to no level of disability. But someone who has an amputation but no prosthetic leg and who does not use crutches to walk around and is mostly at home, with a bad relationship with his/her family has a much higher level of disability. Disability levels can change depending on the attitudinal and environmental barriers the person is facing.



- This picture on the left shows that the lady seating on a wheelchair has a disability as her environment is inaccessible and the boy on her right is not too helpful and absorbed in his work only.

Figure 1: Disability situation of a woman using a wheelchair

Besides that, someone can have an impairment and not have a disability because they can fully participate in all aspects of life due to the use of a wheelchair and accessible home, school, and public transportation. They may do things differently because of their impairment, but they are not disabled, because they can do everything that everybody else can do.

In this picture on the right side, the lady has an impairment (mobility), but as we can see she is a doctor and can work and participate fully in life and so face very little disability. She sits down where she can help the boy; her environment is also adapted to her needs.

Note: Every one of us can face a disabling situation at some point in our lives.

2.5 What is “accessibility”?

There are many different definitions of accessibility depending on how you see it. For the standards, an accessible environment must allow for free and safe movement function and access for all, regardless of age, sex, or condition. It is a space or a set of services that can be accessed by all, without obstacles, with dignity, and with as much autonomy as possible.

Accessibility is a precondition for persons with disabilities to live independently and participate fully and equally in society.

Without access to the physical environment, to transportation, to information and communication, including information and communications technologies and systems, and other facilities and services open or provided to the public, persons with disabilities would not have equal opportunities for participation in their respective societies².

A barrier-free environment is a space or a set of services that can be accessed by all, without obstacles, with dignity, and with as much autonomy as possible. It does not just refer to making a building accessible with a ramp; it includes making the whole area, including entrances, parking, buildings, pathways, transport, services, and (sanitary) facilities in the building easily accessible to all people. A barrier-free environment does not only involve making changes to the built environment but also involves a change in attitude by community members, service providers, employers, employees, policymakers and managers so that they accept that all people have the right to move around freely. This means that people with disabilities should feel welcome by all members of the community, services, and institutions. In Cambodia, most of the public infrastructures are not accessible and mobility options are very limited for people with disabilities which impact strongly their access to services and socioeconomic opportunities.



Figure 2: A woman doctor who has a physical impairment

2 Committee on the Rights of Persons with Disabilities, General comment n°2 on Article 9

2.6 Main definition and concepts

2.6.1 Reasonable Accommodation



According to the CRPD Reasonable Accommodation means “the necessary and appropriate modification and adjustments, not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to people with disabilities the enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms.

According to the Inter-Ministerial Circular No. 005 on Reasonable Accommodation for the Work of Persons with Disabilities dated September 20, 2012, signed by the MoSVY, and the Ministry of Labor and Vocational Training,

Reasonable Accommodation means “the necessary and appropriate modifications that are not burdensome, inappropriate, and inaccurate and that are necessary for specific cases to ensure that persons with disabilities have equal access and exercise of fundamental rights and freedoms together with other people.

What does this mean? This means that organizations, institutions, employers... etc. have the flexibility to implement specific modifications to meet the needs of a person with a disability to ensure their participation and inclusion. These modifications are different from those of the universal design as they are a specific response to the needs of the person who uses services, e.g. employee, manager, school student, etc.

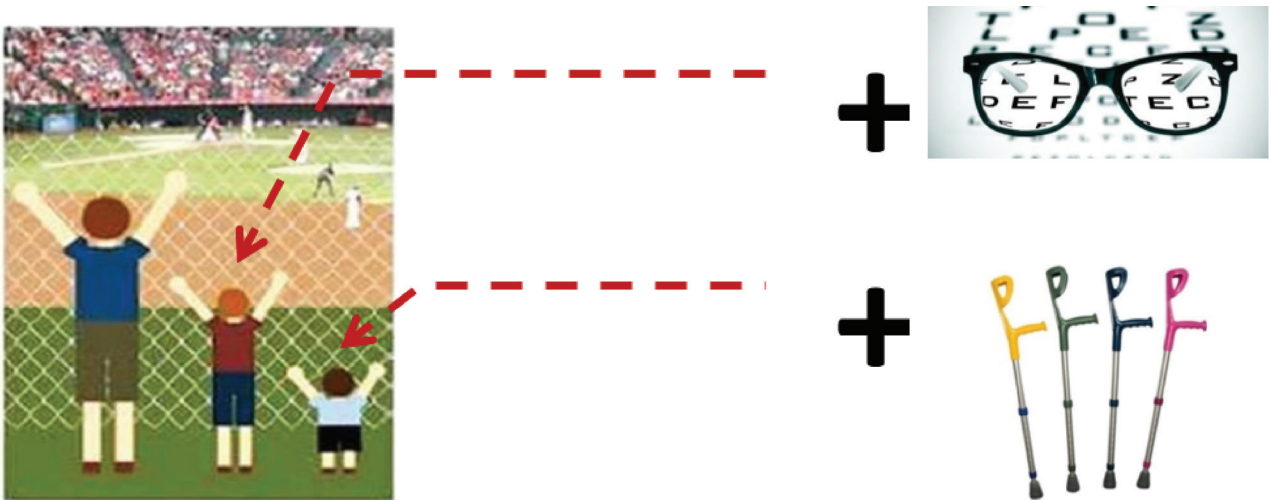
Some examples of reasonable accommodation:

- ▶ allowing flexible working hours if an employee with a disability has difficulty accessing work on time, for whatever reason (e.g. transportation issues). According to Sub-Decree No. 56 on the Management of the Presence of Civil Servants and Contract Officials dated April 1, 2006)
- ▶ article 7 states that the head of the unit direct management shall allow civil servants to start and leave work before and/or after the official working hours, not to exceed one hour for civil servants with the following conditions:
 1. Civil servants who are elderly or mentally ill disorder or permanent disability in charge,
 2. Civil servants who are pregnant,
 3. Civil servants who are disabled
 4. Civil servants who have children under one year,
 5. Civil servants with chronic diseases confirmed by a competent doctor and Age (50) and up,
 6. Civil servants who receive additional training outside of working hours.
- ▶ providing software that translates to words or words to sounds so that a blind person can use a computer
- ▶ allowing a child who finds it difficult to write, more time in an exam
- ▶ having a disability focal point in an organization who has the responsibility to support staff with disabilities to ensure their participation and inclusion
- ▶ several floors buildings ensuring that spaces open to the public are located on the ground floor
- ▶ modifying an existing building with minor changes that will provide major benefits for people with disabilities [handrails, bigger toilets, tactile signage]
- ▶ providing outreach services to people with disabilities' homes instead of delivering center-based services only.
- ▶ changing a job application process.
- ▶ changing the work environment, or the way, a job is usually done.
- ▶ changing policies so that an employee with a disability to enjoy equal benefits and privileges of employment, benefits, and professional development as coworkers.
- ▶ using a wide range of material formats: written, printed, electronic books, videos with closed captions, tactile objects, audiobooks, etc.

2.6.2 Universal design

“Universal design” refers to the design of products, environments, programs, and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design³.

“Universal design” does not exclude assistive devices for particular groups of people with disabilities where this is needed.



The universal design intends to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost.

Universal design benefits people of all sizes, ages, and abilities. What this concept implies is that spaces should not be adapted, but should be designed and built from the beginning in a more inclusive way that meets the needs of all people, including people with disabilities. By designing for human diversity, we can create things that will be easier for all people to use.

The seven principles of universal design:⁴

1. **Equitable use**, the design is useful and relevant to a wide group of users with different abilities.

3 The UN Convention on the Rights of Persons with Disabilities

4 Center for Universal Design, NC State University, North Carolina, 1997



Figure 3: Provide a ramp nearby steps

Other examples:

- The same entrance door for all.
- Adjacent ramp and stairs provide a choice of access to the building.
- The same accessible website for all, including for people who are blind and use screen readers.
- The reception desks provide information accessible to all visitors, regardless of visual abilities, thanks to tactile and high contrasting maps.
- A sliding door provided with opening sensors convenient for all users.

2. Flexibility in use, the design accommodates a wide range of individual preferences and abilities.



Figure 4: Right & left-handed scissors



Figure 5: The table height can be easily adjusted to suit different user needs.

Other examples:

- Railings on both sides of the walkway/ramp provide safety and stability in both directions for right-and-left-handed peoples.
- Double height handrails for adults and children
- A museum/ATM/etc. that allows visitors to choose to read or listen to the description of the contents of a display case.
- A left-and-right handed scissors.

3. **Simple to use**, the design is easy to understand, regardless of the user's experience, knowledge, language skills, or concentration level.

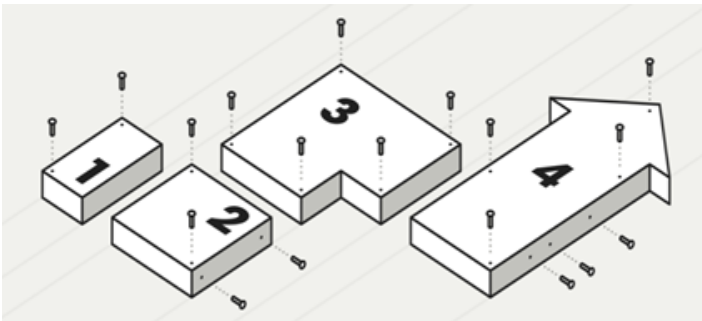


Figure 6: Pictorial instructions



Figure 7: A single lever tap

Other examples:

- Logical layout in a building (reception, waiting area, public toilets, offices open to the public).
- Standardized equipment and tools (mobile phones, operating systems, etc.)
- Operating a single lever tap of a shower is understood without instruction or previous experience.
- Icons used on TV remote control minimize the need for reading.

4. **Perceptible information**, the design communicates necessary information effectively to the user, regardless of environmental conditions or the user's sensory abilities.



Figure 8 & 9: Accessible toilet sign colors, symbols, and brail

Other examples:

- Adequate contrast between essential information and its surroundings
 - Multiple information sources (visual, audible, and written)
 - Wayfinding panels with braille text as well
 - Internet web site includes the text-only option for surfers using screen-reader software.
5. **Tolerance for error**, the design minimizes hazards and the adverse consequences of accidental or unintended actions.



Figure 10: Undo function is a software program enabling the user to undo the last actions.

Other examples:

- A Raised curb on the sides of a ramp to avoid wheels from slipping off.
- No closed roads where it is difficult to do a U-turn
- A double-cut car key that can be inserted in the keyhole no matter in which direction.
- Computer disk management software warns the user of the consequences before formatting

6. **Low physical effort**, the design can be used efficiently and comfortably and with a minimum of fatigue.



Figure 11: Smartphone enabling users to easily navigate apps and contents

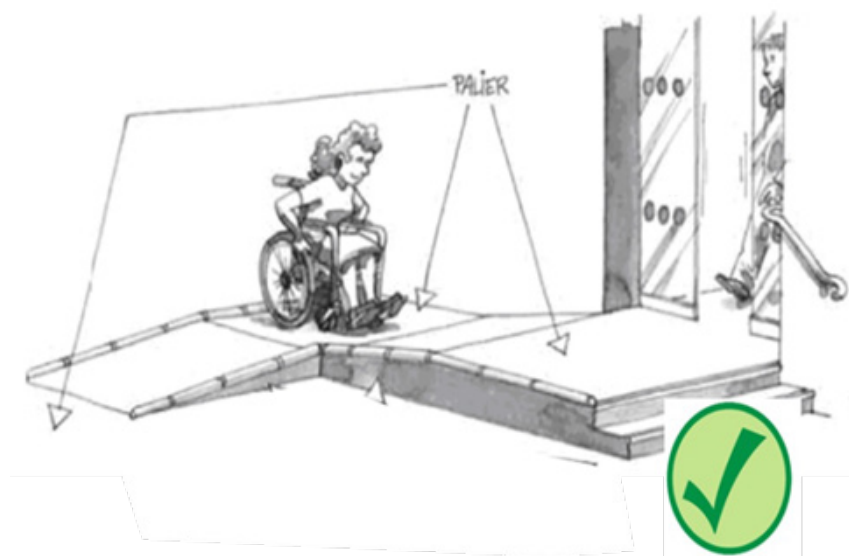


Figure 12: Intermediate landing on a ramp

Other examples:

- Doors that open automatically for people with a wide variety of physical characteristics
- Automatic touch lamps
- A lever handle easy to use without much effort
- Free-rolling casters reduce the physical effort of traveling with carry-on luggage.

7. **Size and space for approach and use**, the design provides appropriate size and space to approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility



Figure 13: A man using a wheelchair is repairing a television on a lower table.



Figure 14: The open space inside the bus allows a man to use a wheelchair to seat.

Other examples:

- A lowered counter section at the office provides a line of sight for users of various heights.
- Clear floor space in front of elevators to easy maneuver.
- A poster with large prints, clearly readable.
- Enough space in toilets for persons using a wheelchair to turn around.
- A wide-opening vehicle door provides for a close approach to the seat with a wheelchair or walker.

Ensuring accessibility standards through applying the principles of universal design leads to a safe environment for everyone, including children, women who are pregnant, people carrying heavy loads, the elderly, people who have a medical condition e.g. heart problem, people who have a temporary impairment or injury (broken leg), and people with disabilities.

ATTENTION

Sometimes, even if a building, a product, a means of transport, a means of communication, is designed in respect of the principles of universal design, some persons still will need assistive devices as mentioned in Article 2 of the CRPD: “Universal design” shall not exclude assistive devices for particular groups of people with disabilities where this is needed.

2.6.3 How to make a built environment accessible through the RECU principle

Ensuring that your place is accessible for all is not just a question of building an accessible ramp. A ramp will only help people with reduced mobility, especially persons in a wheelchair. Even if you build a ramp, the interior layout of the building may prevent wheelchair users to circulate in it, or it will not be adapted for the orientation of persons with visual impairments, or the main services will be at the top floor and the building does not offer an elevator... It's about communicating effectively and facilitating movement, keeping in mind not to break the "chain of movement".

An unbroken chain of movement means that a person with a disability, whatever his or her impairment, can move freely inside and outside any building or house or any other place. A chain of movement that allows people to access all places and services through the RECU steps [Reach, Enter, Circulate, Use] without encountering obstacles or barriers.

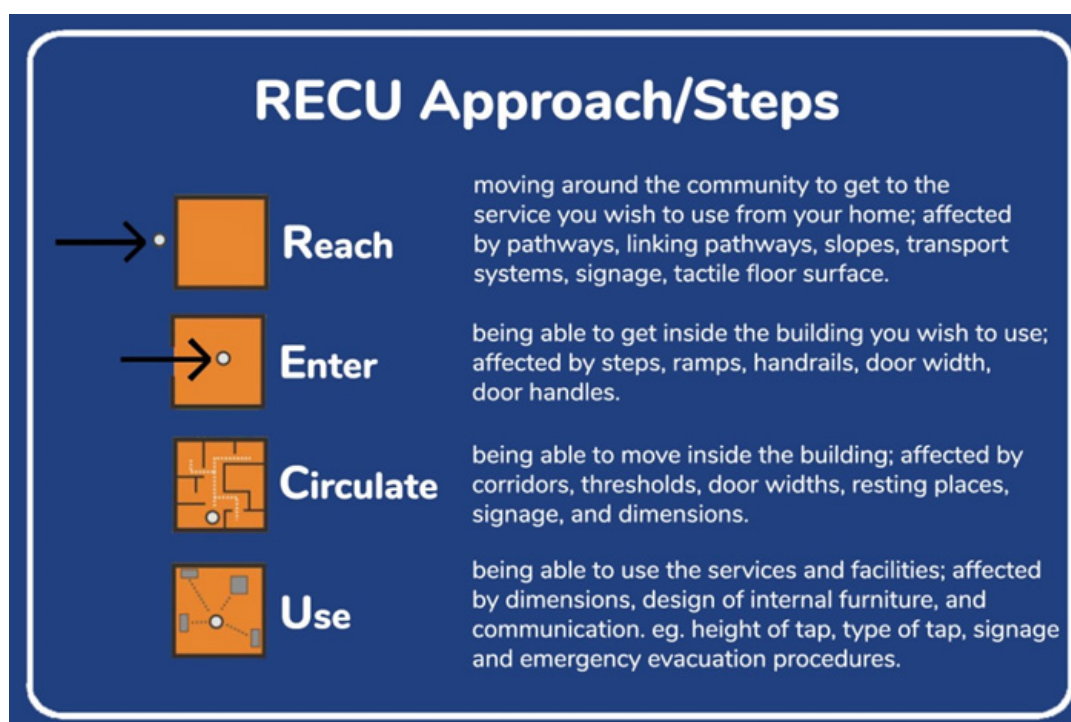


Figure 15: A picture explains the meaning of each step of RECU

This chain of movement must be unbroken because if one of the links is missing, all efforts to provide access to the other links render the overall journey incomplete, and thus inaccessible.

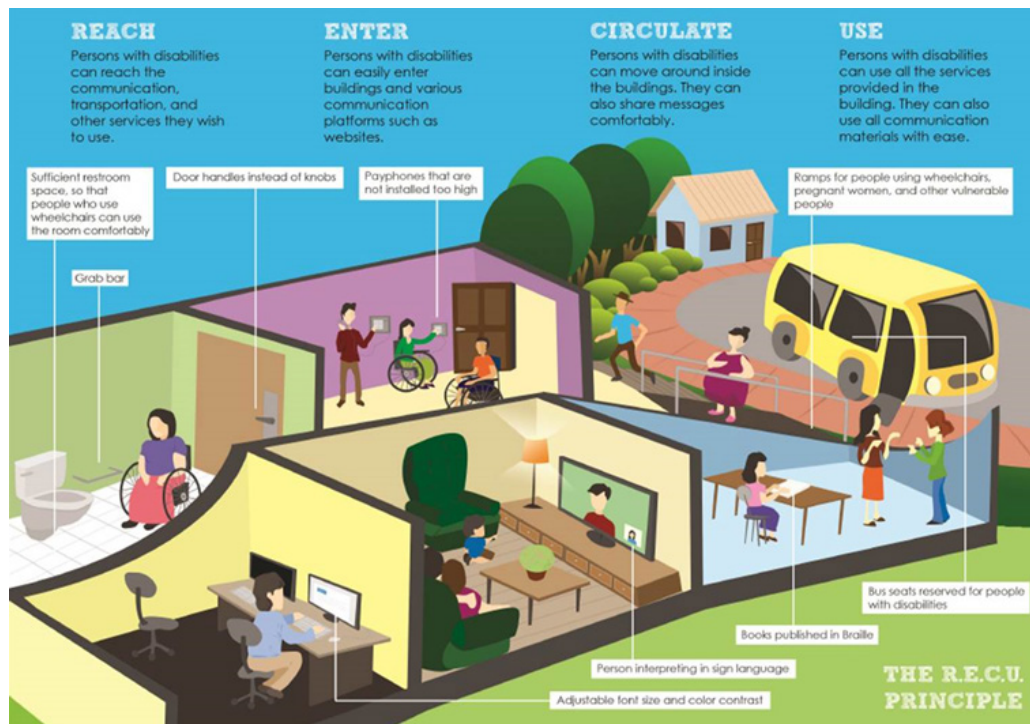


Figure 16: A picture illustrates the RECU principle

2.6.4 The links between Accessibility, Reasonable Accommodation, Universal Design, and the RECU principle

Accessibility of the existing can be improved through Reasonable Accommodations, while the accessibility of infrastructures, services, products or systems to be created can be ensured following the principles of the Universal Design.

The purpose of Universal Design is to provide an accessible environment to all users without any obstacle or barrier. Universal Design is the overall strategy that we have to put in place to ensure that all new environments/products/services are accessible to everyone, and that accessibility is taken into account since the early stages of the conception process. In this way, accessibility features are harmonized in the global design and the extra cost is minimal. On the other hand, if we are dealing with an existing building/product/service and we need to make it more accessible, we will have to apply the principles of Reasonable Accommodation: adapt an existing situation as much as possible, with reasonable measures and not excessive cost, to make it more accessible for everyone.

In both cases, we need to remember that to be efficient accessibility has to be ensured for all the elements of the chain of movement of a

person, from his/her home to his/her destination throughout urban spaces like roads, squares, transportation means, parks, etc. Ideally, the chain of movement should be unbroken and each element should be designed in an accessible way, otherwise, the whole journey would become very difficult for persons with disabilities.

A way to make sure that during the design or the assessment no element is forgotten, is to refer to the RECU steps (Reach, Enter, Circulate, Use). While designing a new environment/service/product or adapting an existing one to make it more accessible, if we want to ensure an unbroken chain of movement we have to consider: 1. how persons with disabilities will reach the facility, 2. how they will Enter the facility, 3. how they will circulate within the facility and 4. how they will use the spaces and equipment in the facility. Following the RECU steps, we make sure that no essential action is forgotten and therefore that the building, service, or product is accessible to everyone.

2.7 Accessibility barriers and examples of responses to address them

When we think of accessibility and a barrier-free environment, we usually think about ramps to assist people with physical impairments who use wheelchairs for mobility. Though a ramp is the most visible modification and essential for people who use wheelchairs to enter buildings, it is not enough to address accessibility problems, as persons with disabilities can face different types of barriers.

2.7.1 Type of Barriers

2.7.1.1 Institutional barriers

- **Political, economic, and legal factors**

Policies and practices do not address universal design or a reasonable accommodation, community consultation does not include people with disabilities, accessibility considered expensive and of benefit to a minority, lack of provision or accountability for maintenance of accessibility, and policies don't address disability issues and the poor financial situation of a household with a person with disabilities.

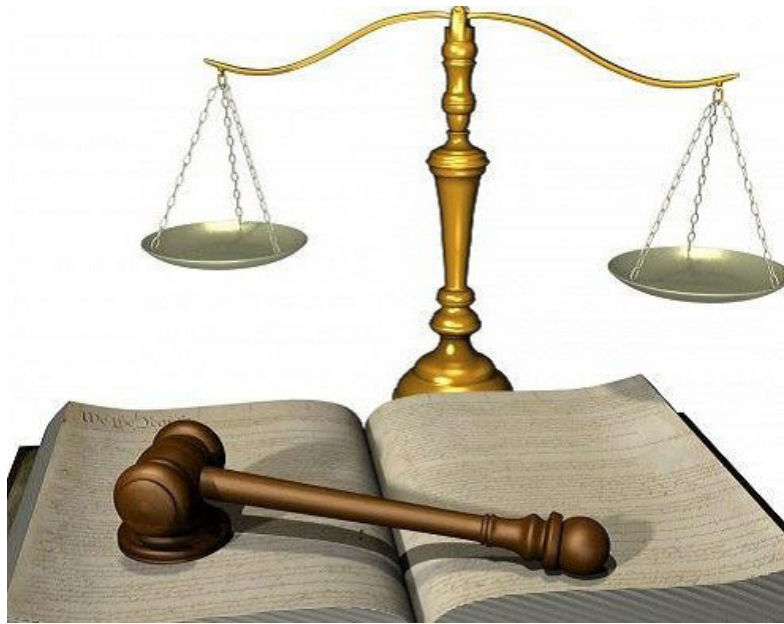


Figure 17: A picture illustrates the policies, law and legal framework

2.7.1.2 Physical environmental barriers

Barriers prevent people with impairments to easily circulate from one place to another and in the built environment, including buildings, roads, bridges, courtyards Public and other utilities, etc.



Figure 18: A woman using a wheelchair cannot access the commune because there is no ramp

- **Natural environment**

Inaccessibility to places like beaches for people in a wheelchair, cliffs that are difficult to climb for people with physical impairments, etc.



Figure 19: The built ramp is not very helpful as the beach remains inaccessible

- **Built space**

Inaccessibility of public transportation, lack of graphic information, and impossibility to use equipment and furniture are inaccessible to people with physical impairments, etc.



Figure 21 & 22: The muddy road and the vehicle parking on the pathway are barriers for persons with disabilities

- **Mistakes**

Barriers created by incorrect or errors or incomplete measures for improving the accessibility of the built environment due to the incorrect or incomplete realization of proposed solutions/new designs or the misunderstanding of accessibility and the guidelines. For example, some mistakes in accessible design can be excessive steepness of ramps, ignorance of basic rules of use, inappropriate interpretations of designs, inappropriate coordination, poor design, poor accessibility planning, and mistaken signage. etc.

Ignorance of Basic Rule of Use



Inappropriate Interpretations of designs

Excessive Steepness of Ramps



Barriers prevent people with visual, hearing, and mental or intellectual impairments to easily find their way into the urban and built environment.

2.7.1.3 Transportation means barriers

Barriers of both private and public transportation restrict travel and use of facilities for people with different disabilities. For example, public buses do not have a ramp at the entrance, not enough spaces or sidewalks or signs for people who use wheelchairs or other people with disabilities, there are not equipped with audio sound or braille inside the public buses for the blind and so on.



Figure 22 &23: Inaccessible public bus entrance

2.7.1.4 Information and communication barriers

- **Inaccessible information and communication**

Audio fire warning systems cannot be heard by people with hearing impairments and signage without images is not helpful for people with mental impairments to easily understand, etc. Some barriers to the communication-related barriers are illustrated below:

- **Overstimulating:** too many colors and decorations.



Figure 24: The rooms are designed with too many colors and decorations.

- **Illegible or contradictory:** Small fonts, information too dense, no graphics or symbols, signboard obscured by trees or other signs.



Figure 25 & 26: An information board of a public bus stop designed with small fonts and directional signs in the city obscured by trees.

- **Confusing:** Too much information, too many different fonts and colors, and elaborated shapes.

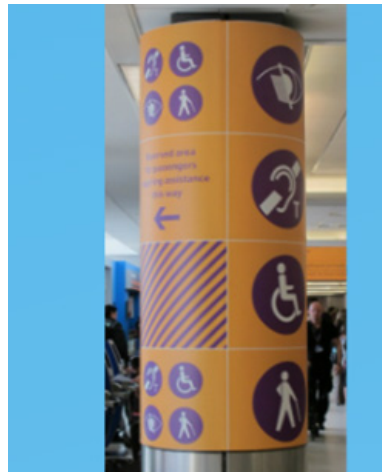


Figure 27: The round shape complicates information reading



Figure 28: Signage with too much information

Note: Effective communication means conveying messages that are simple and understandable by people with impairments.

2.7.1.5 The Attitudinal barriers

Socio-cultural factors (attitudes of people, popular beliefs, discrimination)

People misperception about people with disabilities' abilities (people with disabilities are not able to...), myths about disability (this is due to an ancestor fault or the result of witchcraft), fears: you can get infected if you eat with a person with a disability and become disabled, etc.



Figure 29: A child with epilepsy being discriminated by the community.

- **Social Bad Behavior**

Barriers created by disrespectful behavior that does not take into account the needs of people with disabilities such as lack of attention, respect, and inclusion.

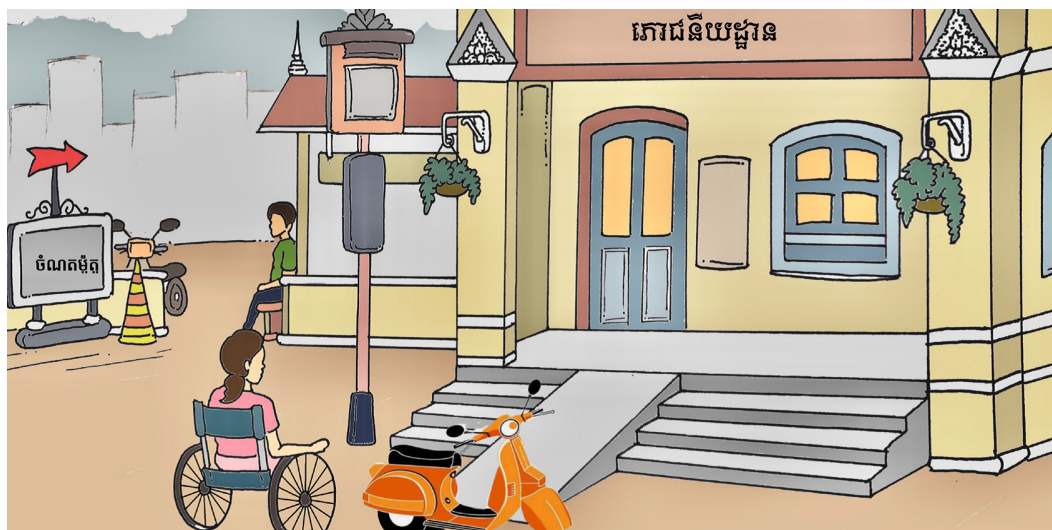


Figure 30: A motor parking in front of the ramp hinders the access of a girl using a wheelchair.

Tips to avoid mistakes:

- Double check that all accessibility upgrades can actually work and operate as expected, by asking people who will use it to test and see if they effectively can use it.
- When building or upgrade, remember you are doing this for everyone, not just for yourself.
- Think also to check and test that your design is in line with the national guidelines
- Evaluate how people execute actions and activities when proposing solutions.
- Organise accessibility assessments with a diversity of people, so they can identify barriers and propose solutions.

2.7.2 Responses to reduce accessibility barriers

The advice below illustrates how specific recommendations, challenge barriers faced by people with different types of impairment. A barrier-free environment needs to be designed for all people, including those with visual, hearing, speech, mental, and intellectual impairments.



People with visual impairment

People with impaired vision have difficulty reading signs and printed information. Blind people are restricted to tactile reading or recorded/audible reading. The main information has to be translated in Braille and visual information should be doubled with audible information, for example, in airports, lifts, and buses.

Actions to ensure a barrier-free environment include:

- Marking a pathway with a contrast strip, so it can be easily identified.
- Securely fixing handrails besides steps, stairs, and ramps will be a guide to help people with visual impairment to use them.
- Using tactile floor marking so that people can move their cane stick/white can across to follow directions and to receive a warning about any change in the environment including direction, doorway, ramp, etc.
- Ensuring all areas are well light.
- Ensuring all signage is clear, in large letters and at eye level, preferably with raised letters that can be felt.
- Using Braille on signage.
- Ensuring pathways and commonly used areas are clear of objects and debris as they are hazardous for people to fall over.
- Setting up sounding alarms for an emergency.
- Applying recommendations for access to written information and offering information in different formats such as large print, braille and recorded/ audio sound.



People with hearing and/or speech impairment

People with hearing impairment have difficulty in understanding words and sounds in noisy environments. Rooms should be acoustically isolated.

Actions to ensure a barrier-free environment include:

Using clear and visible signage to identify directions, emergency exits and provide orientations on the function of rooms.

- Providing written information and a sign language translator in workshops for example.
- Using glare-free lighting to make lip reading and following sign language easier as well as to increase the visibility of signage and written communication.
- Considering acoustics in meeting rooms to promote clear access to auditory information.
- Providing alternate methods of communication in public places, such as paper and pen, so people can write down or draw their questions or requests.
- Setting up visual alarms for emergency



People with intellectual or mental health impairments

People with intellectual or mental health impairments can face difficulties in orientation. A simple design is preferred with clear and unambiguous signs.

Actions to ensure a barrier-free environment include:

- Providing clear, simple, and frequent signage to direct people and reduce the need for asking for assistance.
- Providing a quiet, calm, well-lit, and uncluttered place for asking questions in reception areas as people with intellectual or mental impairments can find unfamiliar places confusing and can make them feel uncomfortable.
- Using easy written and easy to understand the material: clear and simple messages supported by pictures/symbols.



People with physical impairments who use wheelchairs, tricycles, crutches, or walking sticks or who find walking difficult

The main challenge for people using a wheelchair is about moving and working from a sitting position; thus many requirements are associated with the dimensions and other aspects of wheelchairs.

Actions to ensure a barrier-free environment include:

- Making sure pathways, ramps and doorways are wide enough to allow a person using a wheelchair to move easily.
- Placing things such as washbasins, tables, benches, and other facilities so they can be reached from a sitting position and have enough space underneath so that a chair can be wheeled right under them.
- Locating toilets and washing facilities so they are accessible in terms of location and design.
- Securely fixing handrails besides steps, stairs, and ramps to help people to use them.
- Making seats and benches available so people who have difficulty walking can rest.



People with physical impairments who have difficulty using their arms and hands

The main challenges for persons with difficulties using arms and hands are holding or grasping objects, which can include getting dressed, eating, and other activities of daily life.

Actions to ensure a barrier-free environment include:

- Using lever handles rather than knobs for door handles or other taps.
- Fitting with lever-action locks and lever or D-handles
- The handle should not require sustained effort or repeated action to operate.
- Keeping space between the door frames and handle to enable easy use
- Providing light tools or equipment to hold
- Using trolley/buggy to push or bag
- Adapting work/daily life tools
- Extending the length of the pump handle so it is easier to use for all

2.8 Why accessibility is important? Access benefits all

It is essential to provide vulnerable groups and especially people with disabilities with a fully accessible build environment because it is their right. Accessibility is an obligation, also in Cambodia. No state or humanitarian actor can ignore the rights of people with disabilities or their obligations toward the international community. A barrier-free environment supports the dignity and independence of all people. It not only benefits people with disabilities but it is helpful for many other people including:

- Children.
- Women who are pregnant.
- People carrying heavy loads.
- Elderly people
- People who have a medical condition e.g., heart problems.
- People who have a temporary impairment or injury e.g. broken leg.



Figure 31: Accessibility benefits for all

Everyone needs access to school, health facilities, professional training, and leisure activities, to their neighbors, to use the toilet and to water. If there are barriers within the environment and services are not accessible, full participation in the social and economic life of the community and basic human rights is denied to people.

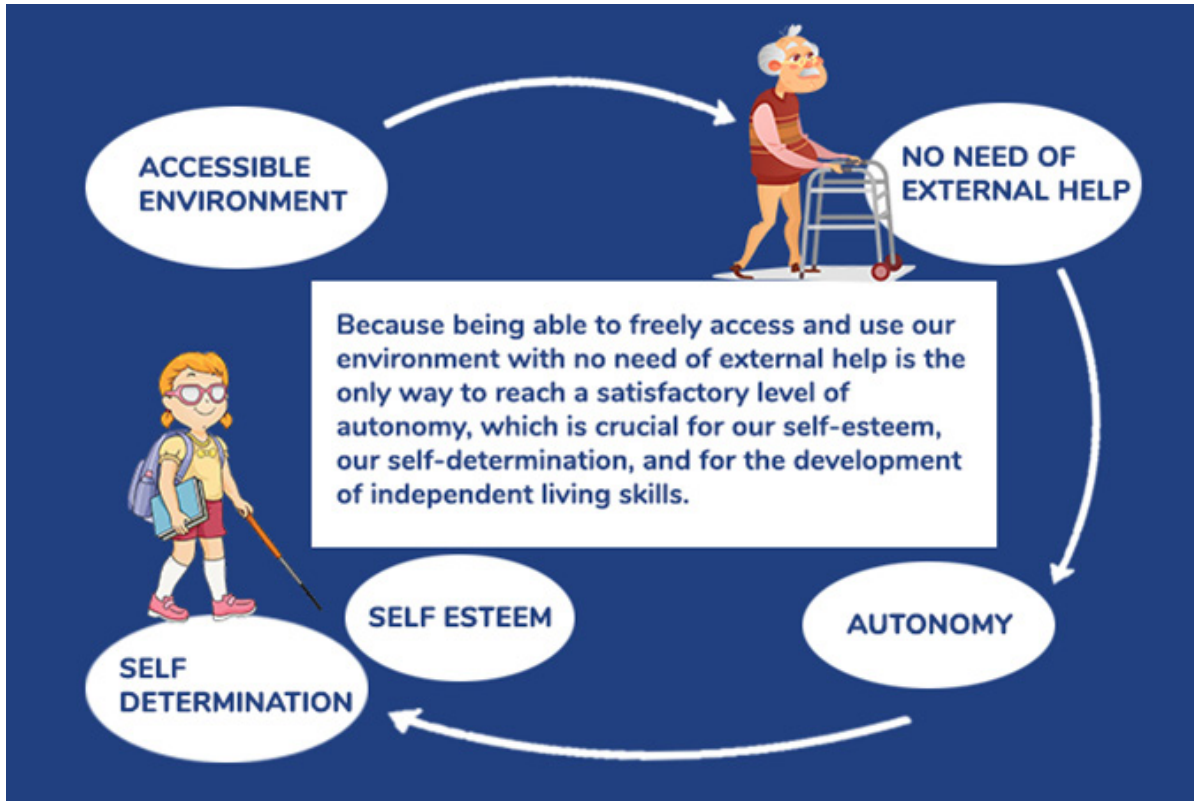


Figure 32: Accessible environment increasing autonomy

SECTION 3: Presentation of Technical Standards on Physical Accessibility-Infrastructure for Persons with Disabilities

3.1 What are the technical standards for?

The standards shall apply to construction projects and modification of public and private infrastructures such as, but not limited to, road networks, walking routes, sidewalks, parks, parking lots, train stations, airports, schools' administrative buildings, education institutions, hospitals and health care facilities, Borey⁵ structures, hotels, restaurants, markets, factories, etc. in the Kingdom of Cambodia to provide accessibility for persons with all types of disabilities to move, enter/exit, move up/down and access easily, safely and without barriers.

Some key terms used in these guidelines are defined as follow:

- **Public Place:** refers to any premise, location, building, and means of transportation in either state, public or private ownership that is open to and provides services for the general public; for instance, ministries, institutions, departments, roads, leisure, and cultural centers, sports centers, recreational resorts, educational establishments, hotels, hospitals, health centers, restaurants, and transportation networks.
- **Infrastructure:** is the basic system, service, equipment, or instruments needed to operate, and support the activities of daily life effectively (such as buildings, roads, transportation services, energy, etc.

⁵ Borey is the local name given to gated housing communities in Cambodia.

- **Public Educational Establishment** refers to public schools that provide education and training to students of all ages. Public Educational Establishment includes all levels of education from kindergarten upwards.

3.2 Who must follow the standards?

The standards should be used by everyone who is designing new constructions or renovating existing buildings and especially for the authorities issuing construction permits. The standards shall require construction owners/builders, project owners, construction contractors, designers, manufacturers, evaluators, and all builders of infrastructure to design and build infrastructures that are accessible for persons with all types of disabilities.

3.3 How are the Technical Standards on Physical Accessibility - Infrastructure for Persons with Disabilities structured?

The standards were designed, compiled and published into a small format (A5) spiral ring book to make it easier for readers to carry and read it. It consists of texts and 169 pictures combined into 338 pages arranged in the following order:

3.3.1 About the Cover

The cover of the standards features a variety of buildings including ancient architectures and new and modern constructions such as the Ministry of Land Management, Urban Planning and Construction, the new National Assembly building; the office of the Ministry of Foreign Affairs and International Cooperation; the Win-win memorial; the Royal Palace; the Railway private condominiums and the Vattanac Capital Tower.

The main graphics on the cover of the book relay message to readers through 8 illustrations from the Universal Design: Figure 1. Parkings 2. Doors. 3. Slope 4. Lighting (indoor equipment) 5. Toilet (sanitary equipment) 6. Counter 7. Building and 8. Toolkit for repair and maintenance of equipment



Figure 33: The cover of the guidelines

In particular, the message and graphics in the center of the cover mean that both the construction of new buildings and the renovation of existing buildings must take into account everyone such as persons with all kinds of disabilities, pregnant women, the elderly, heavy carriers, persons with temporary casualties and children regardless of their size, height and abilities.

3.3.2 About Inter-Ministerial Prakas

According to article 23 of the LPPRPD, the organization of public accessibility or the means of transportation for persons with disabilities shall be determined by an inter-ministerial Prakas by the MoSVY and other concerned ministries/institutions. Public accessibility refers to all means of construction of buildings, which is under the jurisdiction of the MoLMUPC. The means of transportation by land and water are within the jurisdiction of the Ministry of Public Works and Transport, while the air transport management is under the jurisdiction of the Secretariat of State of Civil Aviation Cambodia.

As a result of the discussion between MoSVY and the MoLMUPC on legal and practice aspects, an inter-ministerial Prakas called, “The Inter-ministerial Prakas Promulgating the National Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities” number 248, has been signed on the 28th of November 2018. This Prakas consists of 3 pages and divided into five articles: article 1 defines the provisions, article 2 defines the infrastructure, article 3 defines the obligations of the institution or entity in charge of building permits; article 4 determines the repeal of any provisions contrary to this Prakas and article 5 determines the ministries, institutions, and individuals who bear responsibility in implementing this inter-ministerial Prakas.

3.3.3 About the Working Group

The working group has worked on this initiative since 2016 in close collaboration with Handicap International – Humanity & Inclusion. Until the technical standards were officially approved, there was research on existing documents, analysis, evaluation, and monitoring of Cambodian context, draft the declaration, organize workshops and consultative meetings among stakeholders, graphic designing, and other forms.

Working Group from the Ministry of Land Management, Urban Planning, and Construction

1. H.E. Tith Chantarinne Under Secretary of State
2. H.E. Yos Yomnarady Under Secretary of State
3. Mr. Ae Bunthoeun Head of Legal Department
4. Mr. Chim Vanntha Deputy Chief of Legal Affairs Office

Working Group from Disability Action Council, Ministry of Social Affairs, Veterans and Youth Rehabilitation

1. H.E. Em Chan Makara General Secretariat-Disability Action Council
2. H.E. Ung Sambath Deputy General Secretariat-Disability Action Council
3. Mr. Chhorn Akhra Director of Disability Services Development-Disability Action Council
4. DAC Officers of Disability Services Development

3.3.4 About the contents' table

The contents' table of the book is 14 pages long, with a numerical format of the five sections, indicating the location of each section that starts from page 3 to page 304. Please note that at the beginning of each section of the page there is a snap of a sheet with different colors and images, and it is written at the right end of each sheet that the first part (with a gradient symbol) and the second part (with a picture parking as representative) Part 3 (Picture of building and counter as representative) Part 4 (Picture of the service counter and kitchen size as representative) Part 5 (with a picture of a toilet pan and a bathroom as a representative). Also, to make it easier for readers, the book has a 210mm x 40mm bookmark's sheet that reads: The standards make it easier for people with disabilities, and a bookmark is attached to the book to make it easier to read.

3.3.5 About the chapters

The Technical Standards on Physical Accessibility - Infrastructure for Persons with Disabilities are composed of 5 main chapters with 5 different colors:

- Chapter one: Pathway and Entrances,
- Chapter two: Car Park Environment,
- Chapter three: Building Types,
- Chapter four: Facilities in Buildings, and
- Chapter five: Sanitary Facilities

3.3.6 About Glossary

This section is about the brief explanations of the 21 keywords used in the technical standards. For more information on the details, please refer to the thematic factsheets or read the Technical Standards on Physical Accessibility - Infrastructure for Persons with Disabilities.

3.3.7 About the Printing

The Technical Standards on Physical Accessibility - Infrastructure for Persons with Disabilities was first published in 5,000 copies with financial support from the Australian Government through the Australia-Cambodia Cooperation for Equitable and Sustainable Services (ACCESS).

Conclusion

This Physical Accessibility-Infrastructure Training Manual addresses theories and concepts related to accessibility and it will help the trainers to have a better understanding of the topic and to develop training session plans and a presentation on accessibility.

Complementary information can be found in the other parts of the toolkit:

1. A PowerPoint presentation highlighting a selection of the contents of the manual, to be used by trainers
2. A physical accessibility assessment tool with instructions, to assess the compliance of projects and buildings to the technical standards.
3. A facilitator guide with tips on how to deliver the training, including the training modules, exercise instructions, and the Pre-Post test, to be used by master trainers
4. The thematic factsheets explain the main information captures from each chapter of the national guideline and each factsheet addresses one topic. Thematic factsheets use the same chapter division in the standards and the same color coding for different chapters as in the national Technical Standards on Physical Accessibility – Infrastructure for Persons with Disabilities.

