

## Module 2



## LU 6 - The main access requirements of people with different disabilities and other groups of tourists

**Games Without Barriers project** Co-funded by the Erasmus+ Programme of the European Union  
G.A. n. 2019-1-IT01- KA202-007450 - CUP code G95G19000500006

The content of this document represents the views of the authors only and is their sole responsibility; it cannot be considered to reflect the views of the National Agency or the European Commission or any other body of the European Union. The National Agency and the European Commission do not accept any responsibility for use that may be made of the information it contains.





# LU Objectives



- Learn Requirements related to tourists with different disabilities and/or other specific access requirements.
- Learn Methods to overcome barriers to participation.





# Recap on ICF

Before and after ICF



**Impairment:** any loss or abnormality of physiological, psychological or anatomical structure of function

AFTER ICF: concept revised

**Disability:** any restriction or lack of ability to perform an activity in a manner or within the range considered normal for a human being.

AFTER ICF: Activity limitation

**Handicap:** a disadvantage for a given individual that limits or prevents the fulfilment of a role that is normal

After ICF: Participation limitation





# Recap on ICF

With ICF:



**FUNCTIONING:** umbrella term encompassing all body functions activities and participation

**DISABILITY:** umbrella term for impairments, activity limitations and participation restriction

**IMPAIRMENT:** only seen as problem in body functions or structures, one of the aspects of disability

**Handicap** is SUBSTITUTED BY THE TERM **PARTICIPATION RESTRICTION**, one of the aspects of disability





Abilities of people change from childhood to old age and can vary considerably whatever their age.

People can experience restrictions to their activities because of a mix of possible impairments, health conditions and personal and environmental factors.

Combination of impairments can impose significant limitations, as is often the case in ageing.

Children can also have specific access requirements or impairments.





# Categories of people with disabilities

People with disabilities may have one or more of the following impairments:

- Physical impairments
  - Motor impairments
  - Voice and speech function impairments
- Sensory Impairments
- Cognitive impairments
- Immunological system disfunctions
- Mental ill-health conditions





# Motor impairments

Motor impairment is the partial or total loss of physical abilities including

- Balance
- Walking
- holding and manipulating objects
- pushing, pulling, lifting and reaching.

Many activities involve more than one of these abilities.

Access needs of visitors with motor impairments are related mostly to the **built environment** which should be designed free of barriers and according to Universal Design principles in order to enable all users to move in safety and comfort, to use the facilities and participate in activities.

This group is quite differentiated by the type of their impairment.





## People with difficulties/limitations in walking, balance and limited strength

- For some people, walking on the level or **up or down gradients**/stairs is difficult.
- Some people may have a **limited range of motion**, other may not be able to move on foot independently.
- People with poor balance, with reduced stamina and/or coordination are typically **older people** but also children may be in the same condition.
- People with walking difficulties may not be able to walk a long way or even stand up for long time, **becoming tired quickly**, moving slowly etc. More likely to slip or fall down.





## People with difficulties/limitations in walking, balance and limited strength

- may need frequent seating along a route, where they can stop to rest, regain strength or catch their breath.
- may use supporting walking aids such as mechanical or electric wheelchair, crutches, walker/rollator, walking canes, therefore needing more spaces and level access.
- may not be able to manage steps and may need ramps or lifts.
- may only manage short distances.





## People with difficulties/limitations in walking, balance and limited strength

- may need handrails on both sides of a ramp or staircase for support.
- have difficulties in walking on uneven or loose surfaces.
- may need non-slip floor surfaces.
- may need to rent or borrow walking aids, wheelchairs or scooters available in specific venues.
- may need another person to support them to walk.





## People with difficulties in handling objects

Motor difficulties/impairments are not only related to legs but also to arms, hands and fingers movements.

These impairments can prevent people from manipulating or grasping objects and from doing combined movements or turn the wrist, lift objects etc.

These people may also have difficulty in holding objects, carrying bags and other items or turning handles to open doors, using taps etc.





## People with a limited reach range

The reach range depends on the

- height of the person,
  - their ability to use their arms and balance,
  - their strength and/or mobility of their upper body while seated.
- 
- It is particularly important to have things within easy reach for those with more severe limitations in mobility.
  - Telephones, desks and counters, electrical and other service controls, taps, door handles, window catches, and furniture should be positioned at suitable heights to be easily reached by all users





## People with a limited reach range

The reach range depends on the

- height of the person,
  - their ability to use their arms and balance,
  - their strength and/or mobility of their upper body while seated.
- 
- It is particularly important to have things within easy reach for those with more severe limitations in mobility.
  - Telephones, desks and counters, electrical and other service controls, taps, door handles, window catches, and furniture should be positioned at suitable heights to be easily reached by all users





## People with a limited reach range

For people using wheelchair, the reach range is limited depending on the seated position.

- The design of desks, tables, counters or sinks should allow for easy approach and use
- adequate space for manoeuvring
- suitable height and space for their legs under a sink or table-top.





# Sensory impairments

- Impairment in one or more senses – vision, hearing, touch, taste and smell - reduces a person's ability to perceive, understand and act in various situations.
- people who lose one of the senses later in life may find their activities severely restricted, whilst those who have been blind or deaf since birth may have learned skills that help them to communicate, orientate themselves and carry out their daily activities in an independent manner and find their way.





# Sensory impairments

- People with sensory impairments often cannot travel independently and many have another person - a companion, helper or assistant to help them, especially when travelling and when coming to unfamiliar surroundings for the first time.
- People with sensory impairments may use specialised assistive technologies to help them communicate with other people, read or interpret visual or auditory messages, orientate themselves and move around.





# Vision impairments

People with vision impairments may be blind or partially sighted.

- People with vision impairments can be **exposed to dangers**, including injuring themselves by walking off paths, tripping on steps, bumping into unmarked objects or hurting themselves on hot surfaces or sharp objects and edges.
- If the problem of vision is combined with balance problems the individual is exposed to higher risks, including colliding with objects, slipping and falling.





# Vision impairments

- Visitors with vision impairment (not only blind person) may use a **cane** to detect obstacles on a route.
- Some may use a **guide dog** (service animal) to assist them in way-finding, negotiating road crossings and warning them of dangers.
- Their access needs will vary according to the person's level of sight and will be related mainly to the **access to information, safety of movement and orientation** in an unknown environment.





## People with vision impairments:

- may need more verbal information and more detailed description, with greater accuracy.
- prefer environments and services which are less complex.
- would need audio messages to inform about the facilities, evacuation procedures etc.
- would need adequate tactile and/or audible warnings, wherever there may be a hazard for them.





## People with vision impairments:

- Blind people may find useful information in Braille or raised text .
- may need assistance when entering and leaving different means of transport, such as boats and motor vehicles.
- may be helped by sounds, such as splashing from water fountains or changes of walking surfaces, and smells from fragrant plants can provide cues for orientation, when moving through a building or in outdoor spaces.





# Hearing impairments

- Invisible at a first glance. They include partial hearing loss or complete deafness. The strength, pitch and intensity of sound that can be perceived vary from person to person.
- Access needs related particularly to the communication and access to information.
- People who are born with a hearing impairment or deafness communicate mostly using **sign language**.
- Sign languages vary from country to country, important to know for interpretation purposes.
- People born with a hearing impairment may have difficulty in writing and speaking because of the difficulty they have experienced in acquiring language.





# Hearing impairments

- Most people acquire hearing impairment later in life. This means they are unlikely to be proficient at sign language.
- They make themselves understood mostly in a signed form of their native language or in writing.
- They have often maintained their ability to speak so they are capable of communicating with hearing people relatively well.
- Some individuals are able to lip-read.
- Some people use a hearing aid. |





## Hearing impairments

- Verbal announcements given by public address systems may not be heard .
- Verbal communication is difficult in noisy environments
- The acoustic qualities of rooms will affect the ability to understand language.
- Good overhead lighting is important to lip-reading.





# Hearing impairments

- Hearing loop systems which provide amplified sound directly to a person's hearing aid can be useful in reception areas and ticket sales points to improve verbal communication
- Some people may prefer to see ideograms (pictograms) and drawings to understand and communicate.
- Evacuation procedures should be provided with light signalling that can indicate different important signals (smoke detectors, fire alarms etc.), not only audio devices.





# Speech impairments

- Lack of ability to speak or dysarthria. This may imply difficulties when **holding a conversation** with others.
- People may be **misunderstood**, and this may lead to the danger of not being able to alert service personnel or another individual when needing help or when there is a danger.
- Some people use **sign language** to speak or **assistive devices** to enhance or supplement their speech, either with a keyboard or another communication device.
- **Pictograms** may also serve as a medium of communication for those who lack speech.
- Having **paper and pencil** handy can help to overcome communication problems, in many situations.





## Reduced sense of touch

- People who may have nerve damage, paralysis or missing limbs. Problems in sensing any kind of objects that they have to interact with.
- Some may not be able to feel anything with the **lower part of their body and legs**, others may also have a loss of feeling in the **hands and arms** and upper body.
- Lack of feeling can affect the ability to use a touch screen or other devices that need to be perceived partly by touch.
- Guests who lack the sense of touch or feeling may be at **risk of injury** from objects that are very sharp, very hot or very cold, as they do not react to them on contact.





## Reduced sense of smell and taste

- People experience similar problems linked to their lack of sensory perception.
- Main dangers are in failing to react to toxic chemicals, other dangerous airborne pollutants or smoke from a fire.





# Cognitive impairments and/or learning difficulties and Mental ill-health conditions

- People with problems in understanding, processing or using information
- People on the autism spectrum
- People with Asperger Syndrom
- People with dementia
- People with short-term memory loss
- People with dyslexia
- People who are first time users of a very complex, busy environment





# Cognitive impairments and/or learning difficulties and Mental ill-health conditions

- Difficulty to learn and understand as most people do.
- Difficulty to access information at the same speed or in the same way as others
- Difficulty to follow instructions
- Difficulty to understand where someone is
- Difficulty to identify people or to behave in an appropriate manner in a given setting.
- Dangers of disorientation – getting lost – and the possibility of isolating.
- Memory loss is a form of cognitive impairment. It can cause problems of acting inappropriately in a given situation.





### Cognitive impairments and/or learning difficulties and Mental ill-health conditions

- People with cognitive problems may need assistance and simplified, well-structured information to enable them to be safe and to enjoy a visit.
- It is better to use signs, symbols and pictograms than rely on printed word.
- ‘Easy-to-Read’ is a form of writing that has been developed to inform people with learning difficulties in a simpler way.
- Not noisy environments and avoidance of strobe-flashing lights

People who do not understand the local language may benefit from the above





## Other people with specific access requirements

- Older people
- Small children
- People of very large or small stature
- People who don't understand the local language
- People with long term health conditions:  
(epilepsy, cardio-vascular conditions, allergies and hypersensitivities, food intolerance and special diets, asthma, etc.)





# Older people

- Seniors have a strong need to get detailed information about the destination, the transportation, the services provided and the surrounding area, including information about availability of health care.
- They can be afraid to move around alone in an unfamiliar environment.
- Older people may also have a chronic illness. An accessible environment is important to them.





## Small children

- Areas of motor traffic or mixed traffic (including bicycles) are a hazard for small children.
- Places with unguarded open water present a hazard for those who cannot swim.
- Places that are high up with no guarding, present falling hazards.
- Windows and balcony doors on upper floors without secure fastenings are dangerous.
- Children require adapted communication and visit programme.
- Children under the age of 7 will keep the attention for a short time.





## People of very large or small stature

- Different capabilities in terms of reach and often general mobility may be affected.
- Smaller people can have difficulties in negotiating levels or steps and seeing (due to other people standing in the way).
- Larger people may have difficulty in sitting or moving in confined spaces.
- Those who are grossly overweight may have difficulty in going up or down steps.
- Visitors may be exposed in emergency situations because of their lack of ability to move easily or quickly and are in particular danger in case of evacuations.





# Not understanding the local language

Difficulties to communicate and to understand

- Information
- Warnings
- Directions
- written instructions

This may also expose people to various dangers.





# People with long term health conditions

- People who have allergies (OR allergic reactions) or hypersensitivities
- People with epilepsy
- People with cardio-vascular conditions
- People with diabetes
- People with food intolerance
- People with special dietary requirements

etc





# People with long term health conditions

## Allergies or hypersensitivities

Some people are highly sensitive to certain substances in the environment, in foodstuffs or by direct skin contact, which may all cause allergic reactions.

The type and degree of allergy varies between individuals and can range from mild irritation to poisoning with severe debilitating conditions and even death.

Allergic reactions may be due to plants, hair of animals, food, chemicals and materials such as nickel and latex.

Environmental allergens include dust (often associated with carpets), building materials, smoke and flowering plants.





# People with long-term health conditions

## Allergies and hypersensitivities-food intolerance

- Allergic reactions can include running nose and eyes and breathing problems which in acute circumstances can restrict activities of a person.
- Their reactions may be similar to those of the person who is lacking in stamina.
- Where meals and drinks are included in a tour, it is necessary for visitors to inform the group leader and/or catering outlet if they have food allergies.





# Epilepsy

- Neurological disorder characterized by [epileptic seizures](#).
- Person can get hurt fainting, falling or hitting inappropriately any object.
- Need to **prevent the fall**, something which is not always possible.
- When the person regains consciousness, they can be confused, disoriented, have difficulty in speaking, or can be not lucid and not realize what happened.
- Need to avoid situations and places that may trigger the seizures (lack of sleep, tiredness, change of climate, stress, places with bright and flashing lights, etc.).



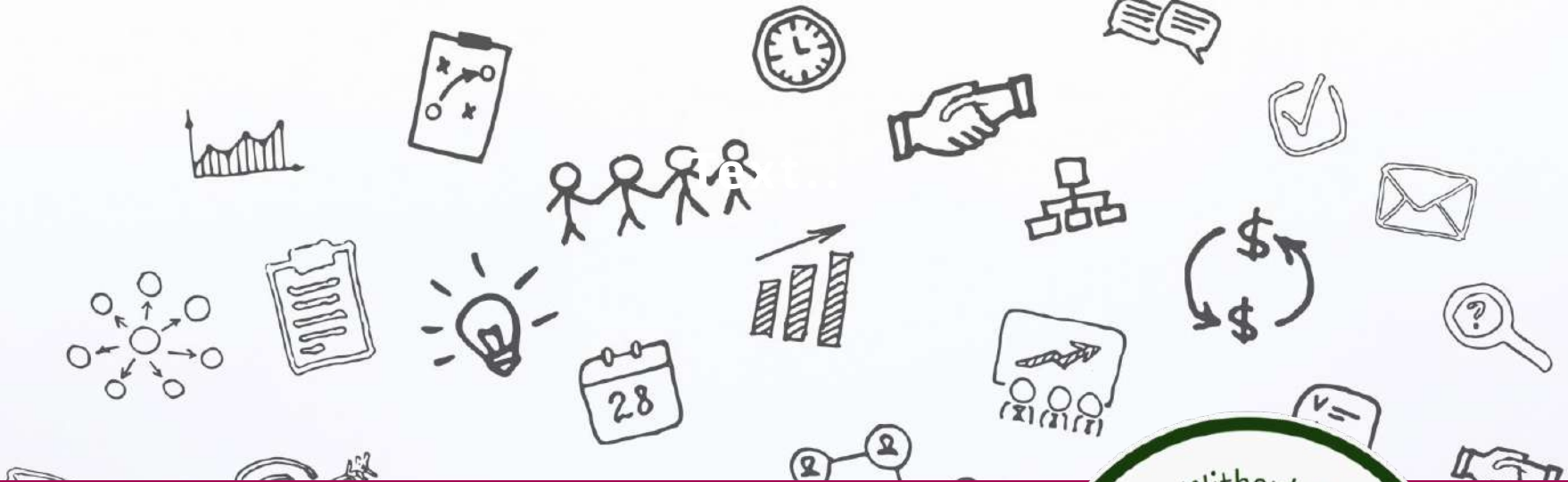


## Persons with Reduced Mobility (PRMs)

The term “People with Reduced Mobility (PRMs)” it is used specifically in the passenger transport sectors: air/rail/ferry/bus and coach, but we do **not** use it generally, as it is not clear which groups it refers to.

The different “classes” of PRMs are defined according to IATA codes but even these are very general.





## Disclaimer

Some of the images included in the presentation are taken from the Internet: if their use is subject to copyright, please notify it to the coordinator of Games Without Barriers project who will promptly remove them.

Send the notification by e-mail to [m.minuti@incipitconsulting.it](mailto:m.minuti@incipitconsulting.it)



**Games Without Barriers project** Co-funded by the Erasmus+ Programme of the European Union  
G.A. n. 2019-1-IT01- KA202-007450 - CUP code G95G19000500006

The content of this document represents the views of the authors only and is their sole responsibility; it cannot be considered to reflect the views of the National Agency or the European Commission or any other body of the European Union. The National Agency and the European Commission do not accept any responsibility for use that may be made of the information it contains.