IDEA: Inclusive tertiary Education in the West BalkanS

http://idea-cbhe.com

D2.3.3-A Training of the University Administration Services for Accessible Tertiary Education – Training of Built Environment Accessibility Consultants - Training material

March 2022

IDEA project Partners

POLIS University (ALB)

Universum College (KS)

University "Aleksandër Moisiu" Durrës (ALB)

University of Donja Gorica (MNE)

University of Medicine, Tirana (ALB)

National & Kapodistrian University of Athens (GR)

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Albanian Disability Right Foundation (ADRF)

University of Pristina (KS)

Association of Paraplegic and Paralyzed Children in Kosovo (HANDYKOS)

International Business College of Mitrovica (KS)

Association of Youth with Disabilities of Montenegro (AYDM)

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Project Title: **IDEA - Inclusive tertiary Education in the West Balkans**
Work Package 2: **Establishment/Enhancement & Operationalization of Accessibility Units**
Task D2.2.1: **Training of the University Administration Services for Accessible Tertiary Education**
Activity D2.2.1.2: **Training of Built Environment Accessibility Consultants**
POLIS University, **14-18 March 2022, Tirana, Albania**

Built Environment Accessibility Definition and Standards

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Speech and Accessibility Lab

Co-funded by the Erasmus+ Programme of the European Union

What is built environment?

- The term 'built environment' refers to aspects of our surroundings that are built by humans, that is, distinguished from the natural environment. It includes not only buildings, but the human-made spaces between buildings, such as parks, and the infrastructure that supports human activity such as transportation networks, utilities networks, flood defences, telecommunications, and so on.

ice   CIOB   BSRIA   IHBC   CIAT   ECA

https://www.designingbuildings.co.uk/wiki/Built_environment

Co-funded by the Erasmus+ Programme of the European Union

Built environment definition (CIC)

The Construction Industry Council (CIC) suggest that the built environment,

- '...encompasses all forms of building (housing, industrial, commercial, hospitals, schools, etc.), and civil engineering infrastructure, both above and below ground and includes the managed landscapes between and around buildings.'

https://www.cic.org.uk/

Built environment definition (CDC)

According to the Centers for Disease Control and Prevention (U.S.A.):

- The built environment includes the physical makeup of where we live, learn, work, and play—our homes, schools, businesses, streets and sidewalks, open spaces, and transportation options. The built environment can influence overall community health and individual behaviors such as physical activity and healthy eating.

The Built Environment Assessment Tool Manual | DNPAO | CDC.
www.cdc.gov. 05-02-2019. Retrieved 10-3-2022.

Built environment definition (Wikipedia)

- In urban planning, architecture, landscape architecture, and civil engineering, the term **built environment**, or built world, refers to the human-made environment that provides the setting for human activity, including homes, buildings, zoning, streets, sidewalks, open spaces, transportation options, and more. It is defined as "the human-made space in which people live, work and recreate on a day-to-day basis."

https://en.wikipedia.org/wiki/Built_environment

Built environment definition (Convergence Partnership)

- The "built environment encompasses places and spaces created or modified by people including buildings, parks, and transportation systems." In recent years, public health research has expanded the definition of built environment to include healthy food access, community gardens, walkability, and bikability.

Lee, V., Mikkelsen, L., Srikantharajah, J., Cohen, L. Strategies for Enhancing the Built Environment to Support Healthy Eating and Active Living. Convergence Partnership, prepared by Prevention Institute. 2008. Retrieved 10-03-2022.

What is Accessibility?

- **Accessibility** is the design of products, devices, services, vehicles, or environments so as to be usable by people with disabilities. The concept of accessible design and practice of accessible development ensures both "direct access" (i.e. unassisted) and "indirect access" meaning compatibility with a person's assistive technology (for example, wheelchairs).

- **Accessibility** can be viewed as the "ability to access" and benefit from some system or entity. The concept focuses on enabling access for people with disabilities, or enabling access through the use of assistive technology; however, research and development in accessibility brings benefits to everyone.

The context of accessibility

- **Accessibility** is not to be confused with **usability**, which is the extent to which a product (such as a device, service, or environment) can be used by specified users to achieve specified goals with effectiveness, efficiency, convenience satisfaction in a specified context of use.

- **Accessibility** is strongly related to **universal design** which is the process of creating products that are usable by people with the widest possible range of abilities, operating within the widest possible range of situations. This is about making things accessible to all people (whether they have a disability or not).

The Accessible Campus: Built Environment, Facilities and Grounds (Australia case)

- The provision of accessible grounds, facilities, and built environments on campus is key to ensuring that educational institutions are inclusive and welcoming to students, staff, and visitors living with a disability.
  - The Australian Disability Discrimination Act (1992) mandates that public spaces must be accessible. Inclusive practices in the area of accessibility support not only people living with a disability but also those who are not impacted by disability. It is simply best practice.
  - The Australian Disability (Access to Premises – Buildings) Standards (2010) provides the minimum accessibility requirements for people with disability for new constructions or renovations to existing buildings. The provision of accessible spaces in educational settings should however, move beyond minimum requirements, aspiring to a best practice approach using universal design principles.

https://www.adcet.edu.au/disability-practitioner/your-role/accessible-campus

ADCET Australian Disability Clearinghouse on Education and Training
Supporting you, Supporting Students

European standardisation process

European Disability Forum statement on European Commission's draft standardisation request for the European Accessibility Act (14-12-2021):

- EDF welcomes the formal notification by the European Commission to the European standardisation organisations and European stakeholder organisations in relation to the development of the Accessibility Act standards. With this, the Commission has published the final draft standardisation request for developing harmonised standards in support of the European Accessibility Act (Directive (EU) 2019/882) after consulting relevant stakeholder organisations, including organisations of persons with disabilities.

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European standardisation organisations

- The European Committee for Standardization (CEN) is one of three European Standardization Organizations (together with CENELEC and ETSI) that have been officially recognized by the European Union and by the European Free Trade Association (EFTA) as being responsible for developing and defining voluntary standards at European level.
  - CEN-CLC/JTC 11 'Accessibility in the built environment' develops standardization deliverables as requested by the mandate M/420 'European accessibility requirements for public procurement in the built environment'.
  - Based on this mandate, CEN-CLC/JTC 11 recently published **EN 17210:2021 'Accessibility and usability of the built environment - Functional requirements'**.

Standard EN 17210:2021 - Accessibility and usability of the built environment - Functional requirements

- This document describes basic, minimum functional requirements and recommendations for an accessible and usable built environment, following "Design for All"/"Universal Design" principles which will facilitate equitable and safe use for a wide range of users, including persons with disabilities. The requirements and recommendations given in this document are applicable across the full spectrum of the built environment. These functional accessibility and usability requirements and recommendations are relevant to the design, construction, refurbishment or adaptation, and maintenance of built environments including outdoor pedestrian and urban areas.

CEN/CLC/JTC 11 Published Standards

Development of the standardization deliverables as requested by Mandate/420 Phase II :

- A European Standard (EN) on functional European accessibility requirements
- A Technical Report (TR1) on technical performance criteria
- A Technical Report (TR2) on conformity assessment

CEN/TR 17621:2021 - Accessibility and usability of the built environment - Technical performance criteria and specifications

This document has been developed to support EN 17210, "Accessibility and usability of the built environment – Functional requirements"

- Provides and exemplifies technical performance criteria and specifications
- Follows the Design for All/Universal design principles
- Specifies what is necessary to align with these principles
- Applicable across the full spectrum of the built environment and can be used as criteria for awarding public contracts (in support of the Public Procurement Directives)
- Specifically applicable to the design, construction, refurbishment or adaptation, and maintenance of public or public-use environments including external areas
- Alternatively, national standards and regulations may determine the technical performance criteria and specifications to fulfil the functional requirements of EN 17210.

CEN/TR 17622:2021 - Accessibility and usability of the built environment - Conformity assessment

This document provides criteria to assess conformity of the built environment with the functional requirements and recommendations described in EN 17210

- Provides guidance on how and when accessibility and usability of the built environment have to be considered throughout all stages of the building process, including feasibility, design, construction, completion and post occupancy
- Applicable for refurbishment or adaptation of existing buildings.

EN 17210:2021 contents (1/3)

- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Legal and policy background and associated benefits
- 5 Diversity of users and design considerations
- 6 Wayfinding
- 7 Access in the outdoor environment

EN 17210:2021 contents (2/3)

- 8 Arrival and departure areas – Parking areas
- 9 Horizontal circulation in buildings
- 10 Vertical circulation in buildings and outdoors
- 11 Specific indoor and outdoor areas, equipment and provisions
- 12 Sanitary accommodation
- 13 User interface, controls and switches
- 14 Fire safety for all - Evacuation and emergency exits
- 15 Environmental conditions in buildings

EN 17210:2021 contents (3/3)

- 16 Accommodation
- 17 Cultural, leisure and sport buildings
- 18 Administrative, service and employment buildings
- 19 Outdoor and urban areas
- 20 Transport facilities
- Annex A (informative) Fire safety for all in buildings and assisted evacuation
- Annex B (informative) Management and maintenance issues

EN 17210: 4 Legal and policy background and associated benefits

- 4.1 European legal background
- 4.2 Accessibility and usability, 'Universal Design' and 'Design for All'
- 4.3 Mandate 473 and CEN-CENELEC Guide 6
- 4.4 Accessibility contributing to safety
- 4.5 Integrate accessibility at all stages of procurement, design, construction and conformity assessment
- 4.6 Accessibility consultation
- 4.7 Accessibility: Contributing to health and wellbeing
- 4.8 Accessibility planning as an overall strategic issue
- 4.9 Accessibility: Economic and social benefit
- 4.10 Accessibility and the sustainable built environment

EN 17210: 5 Diversity of users and design considerations

- 5.1 Diversity of users
- 5.2 Human abilities and design parameters
- 5.3 Key areas for accessibility and usability of the built environment

EN 17210: 6 Wayfinding

- 6.1 Wayfinding, orientation and navigation
- 6.2 Wayfinding information
- 6.3 Visual contrast
- 6.4 Tactile information
- 6.5 Audible information and hearing enhancement
- 6.6 Signage
- 6.7 Graphical symbols

EN 17210: 7 Access in the outdoor environment

- 7.1 Accessible routes
- 7.2 Street furniture
- 7.3 Pedestrian crossings
- 7.4 Squares and plazas
- 7.5 'Shared Space' design approach
- 7.6 Plantings
- 7.7 Pedestrian bridges and underpasses

EN 17210: 8 Arrival and departure areas – Parking areas

- 8.1 Rationale
- 8.2 Boarding points/Set-down points
- 8.3 Location of designated accessible parking spaces
- 8.4 Number of designated accessible parking spaces
- 8.5 Design of designated accessible parking space
- 8.6 Pedestrian paths in car parks
- 8.7 Signage of designated parking spaces
- 8.8 Access from parking space to an adjacent higher pedestrian path
- 8.9 Surface
- 8.10 Indoor parking
- 8.11 Cycle parking

EN 17210: 9 Horizontal circulation in buildings

- 9.1 Entrances
- 9.2 Corridors and passageways
- 9.3 Doors
- 9.4 Windows
- 9.5 Patios, balconies, terraces
- 9.6 Surface finishes and materials

EN 17210: 10 Vertical circulation in buildings and outdoors

- 10.1 Ramps
- 10.2 Steps and stairs
- 10.3 Handrails
- 10.4 Lifts
- 10.5 Vertical and inclined lifting platforms
- 10.6 Escalators and moving walks

EN 17210: 11 Specific indoor and outdoor areas, equipment and provisions

- 11.1 Service counters for information, ticketing and reception
- 11.2 Waiting and queuing areas
- 11.3 Seating and resting areas
- 11.4 Storage areas, lockers and baggage storage
- 11.5 Kitchen areas and kitchenettes
- 11.6 Facilities for assistance dogs (outdoor and indoor)

EN 17210: 12 Sanitary accommodation

- 12.1 Accessible toilets
- 12.2 Toilets for general use
- 12.3 Sanitary facilities for other users
- 12.4 Showers and bathrooms

EN 17210: 13 User interface, controls and switches

- 13.1 Rationale
- 13.2 Public ICT information screens
- 13.3 ICT user interfaces
- 13.4 Controls and switches
- 13.5 Examples of general use elements

EN 17210: 14 Fire safety for all - Evacuation and emergency exit

- 14.1 Concept for Fire safety for all
- 14.2 Fire engineering design objectives
- 14.3 Evacuation for all
- 14.4 Assistive fire evacuation: Areas of rescue assistance
- 14.5 Emerging fire evacuation technologies
- 14.6 Fire defence plans
- 14.7 Lifts for emergency evacuation
- 14.8 Emergency warning systems, signals and information
- 14.9 Emergency exit doors

EN 17210: 15 Environmental conditions in buildings

- 15.1 Lighting
- 15.2 Acoustics
- 15.3 Indoor air quality

EN 17210: 16 Accommodation

- 16.1 General
- 16.2 Hotels
- 16.3 Student accommodation
- 16.4 Adaptable housing

EN 17210: 17 Cultural, leisure and sport buildings

- 17.1 General
- 17.2 Auditoriums, concert halls and similar
- 17.3 Libraries
- 17.4 Museums
- 17.5 Heritage buildings and sites
- 17.6 Retail and shopping buildings
- 17.7 Sport facilities
- 17.8 Restaurants, bars and cafés
- 17.9 Swimming pools, saunas

EN 17210: 18 Administrative, service and employment buildings

- 18.1 General
- 18.2 Conference venues
- 18.3 Offices
- 18.4 Healthcare buildings
- 18.5 Educational buildings
- 18.6 Laboratories
- 18.7 Banks, post offices
- 18.8 Industrial buildings
- 18.9 Courts, police stations and detention facilities
- 18.10 Religious buildings

EN 17210: 19 Outdoor and urban areas

- 19.1 General
- 19.2 Playgrounds
- 19.3 Garden, parks and nature parks
- 19.4 Beaches

EN 17210: 20 Transport facilities

- 20.1 General
- 20.2 Taxi facilities
- 20.3 Bus and Coach facilities
- 20.4 Rail facilities
- 20.5 Metro/underground facilities
- 20.6 Tram and light rail facilities
- 20.7 Airport facilities
- 20.8 Ports facilities
- 20.9 Cable car facilities
- 20.10 Service stations

EXAMPLE EN 17210: 5.3 Key areas for accessibility and usability of the built environment

Accessible and usable ...

- Pedestrian areas
- Approach to the building
- **Entrances**
- Routes in horizontal circulation
- Routes in vertical circulation
- Rooms
- Equipment and facilities
- Toilets and sanitary facilities
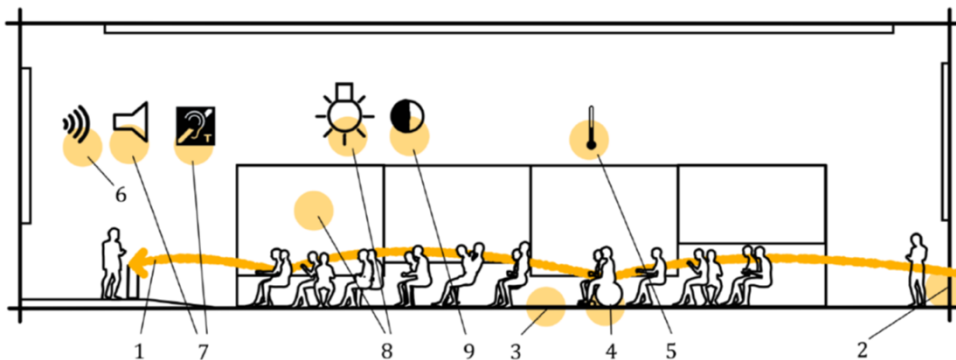- Exit and evacuation routes
- **Information via multiple senses**
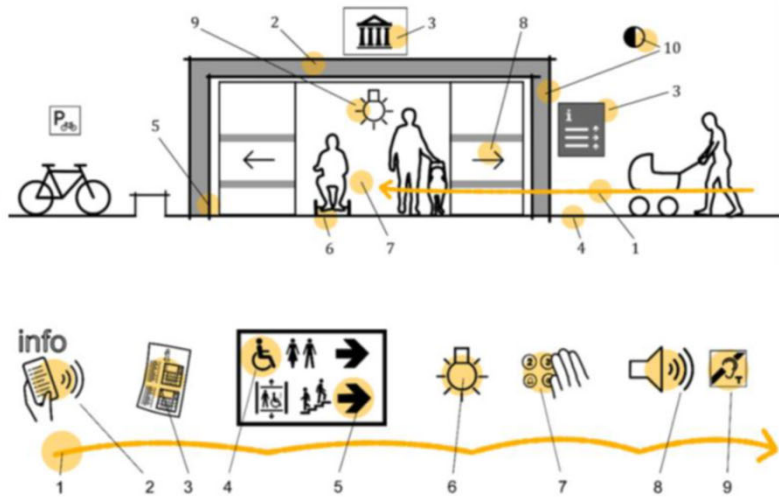
EXAMPLE EN 17210: Main issues

Accessible and usable rooms

1 accessible route in rooms
2 adequate door widths
3 adequate circulation space
4 different seating options
5 good indoor climate
6 good acoustics
7 good sound and hearing enhancement systems
8 good lighting
9 good visual contrast

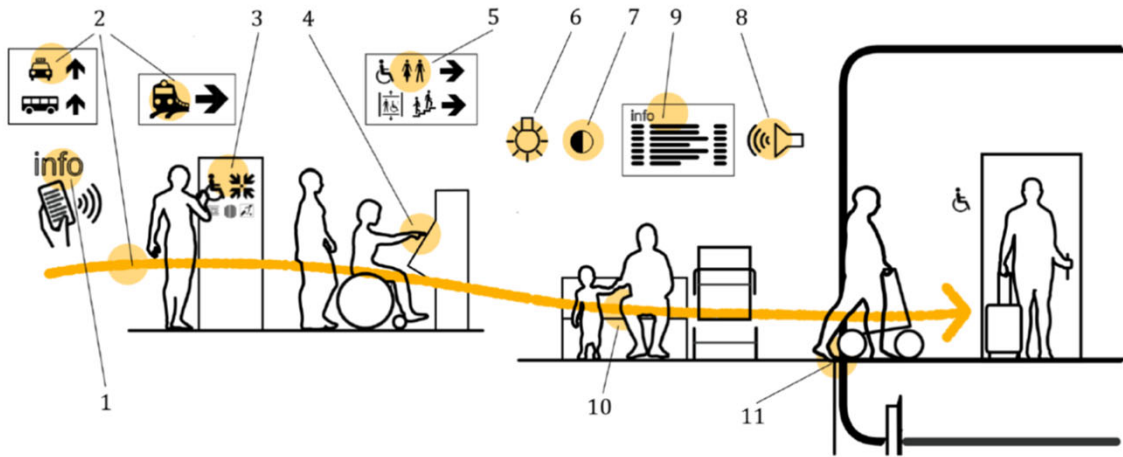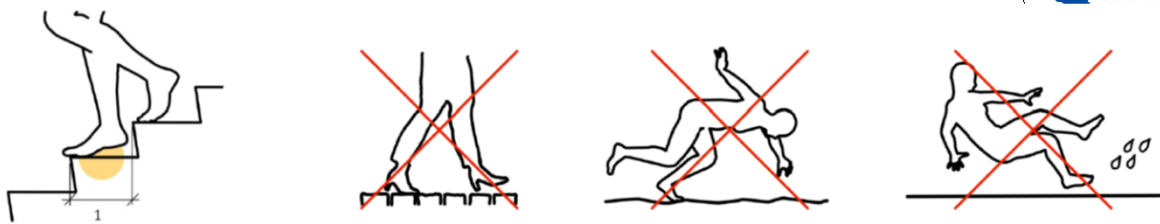## EXAMPLE EN 17210: Main issues

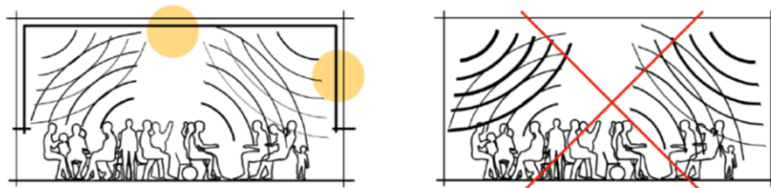Accessible routes in railway stations

EXAMPLE EN 17210: Detailed issues

Example of adequate foot support on stairs
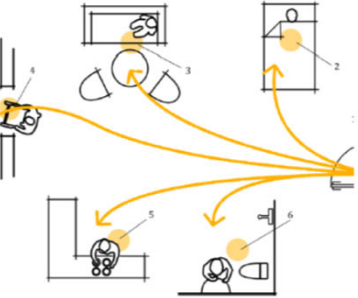
Examples of incorrect surfaces of routes

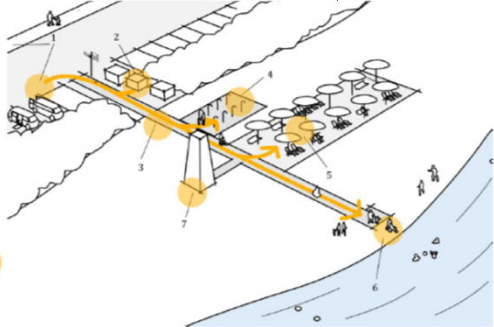Examples of adequate and inadequate absorption of noise in rooms
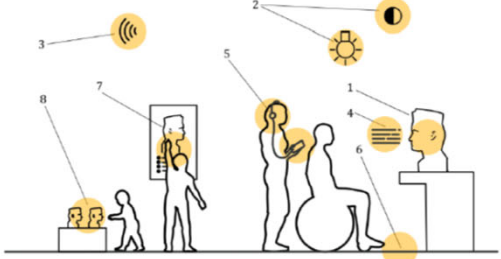
EXAMPLES EN 17210

Example main functionalities in adaptable housing/dwellings

Example of an accessible museum display

Example of an accessible beach service point

Workshop

Towards common European criteria on accessibility of the built environment: Outcomes of Mandate M/420

Day: 2021-03-22, Monday — **Schedule:** 10:00 to 12:15

Accessibility provisions: Sign language and live captions

Platform: Zoom

Registration

Programme

10:00 – 10:20 Welcome

Javier García
Director General, UNE

Katarina Ivankovic-Knezevic
*Director Social Affairs, DG Employment,
Social Affairs and Inclusion, European
Commission*

Cinzia Missiroli
*Director of Standardization & Digital
Solutions, CEN-CENELEC*

Jesús Hernández-Galán
*Chair of CEN-CLC JTC 11. Director of
Accessibility and Innovation, Fundación ONCE*

**10:20 – 10:35 EC impulse of common accessibility
criteria throughout Europe**

Inmaculada Placencia Porrero
*Senior Expert in Disability and Inclusion, DG
Employment, Social Affairs and Inclusion,
European Commission*

**10:35 – 10:50 EN 17210:2021, 1st European standard
on accessibility of the built environment**

Monika Klenovec
*Project Team leader. Architect & Univ.-Lect.
TU Vienna*

Søren Ginnerup
*Project Team expert, formerly Danish
Building Research Institute*

**10:50 – 11:05 How to assess conformity against
EN 17210: FprCEN/TR 17622**

Delfin Jiménez
*Project Team expert, PhD Architect, Planner
& Access Consulting, EQAR SLP*

**11:05 – 11:15 Technical performance criteria and
specifications: FprCEN/TR 17621**

Monika Klenovec
*Project Team leader. Architect & Univ.-Lect.
TU Vienna*

Søren Ginnerup
*Project Team expert, formerly Danish
Building Research Institute*

11: 15 – 11:55 User´s perspective

Tatiana Alemán Selva
*Director, State Reference Centre for
Personal Autonomy and Technical Aid
(Ceapat)*

Mher Hakobyan
*Accessibility Officer, European Disability
Forum (EDF)*

Chiara Giovannini
*Senior Manager and Deputy Secretary-
General, ANEC*

Fionnuala Rogerson
*Co-director, International Union of
Architects, Architecture for All Work
Programme*

11:55 – 12:10 Questions from the audience

12:10 – 12:15 Wrap up

Fernando Machicado
*Secretary of CEN-CLC JTC 11. Stakeholder
Engagement, UNE*
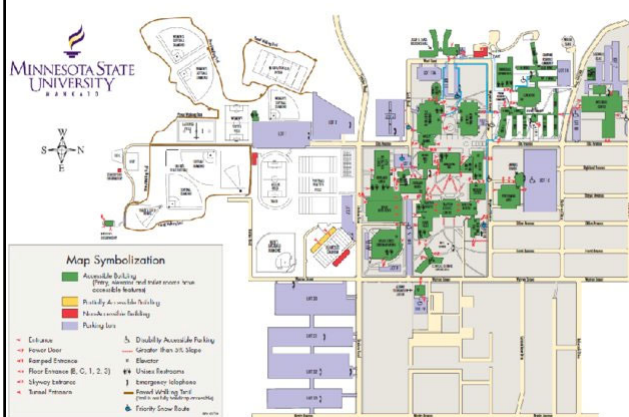
The works of M/420 are funded by the EC and EFTA.

Co-funded by the
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of the European Union

What are some of the areas to consider in relation to accessibility on campus?

Area

- Maps and Processes

What to look for

- Are maps that indicate accessible entrances, accessible bathroom facilities, lifts, accessible car parking and accessible routes of travel around campus readily available and digitally accessible online or otherwise?

- Is there a process for assisting new students, staff or visitors living with disability to orient themselves to the campus? Is information about the process readily available (and accessible)?
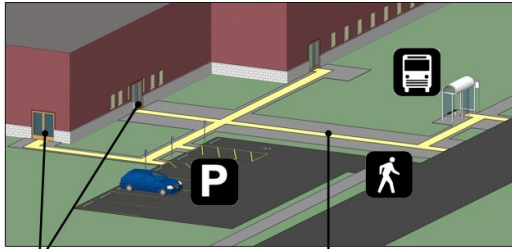
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What are some of the areas to consider in relation to accessibility on campus?

Area

- Accessible paths of travel (external)

Site arrival points include accessible parking spaces and accessible passenger loading zones, public transit stops located on sites, and pubic streets and sidewalks.

An accessible route must connect site arrival points to each accessible entrance they serve.

Accessible routes must coincide with, or be in the same vicinity as, general circulation paths (§206.3).

If no pedestrian route onto a site is provided and site entry is by vehicle only, an accessible route from the site boundary is not required (§206.2.1, Ex. 2). Where a vehicular way does provide pedestrian access, such as a shopping center parking lot, an accessible route is required.

What to look for

- Is there a clear and continuous accessible path of travel to major entry points of the campus from public transport or car parks?
- Are external paths wide enough for a person using a wheelchair / walking frame /mobility aid to pass by someone else or are there regular passing and turning spaces along the path? (NB: Paths should be no less that 1200mm wide).
- Is there a process for ensuring that pathways are clear at head height i.e. that branches are regularly trimmed?
- Are tactile indicators used for changes in surface, height or junction?

What are some of the areas to consider in relation to accessibility on campus?

Area

- Signage

What to look for

- Is there clear signage apparent on buildings (e.g. building numbers and/or title and/or building function) and facilities (e.g. bathroom facilities, student administration)?
- Does way-finding and facility signage include raised tactile and/or braille information?

## What are some of the areas to consider in relation to accessibility on campus?

Area

- Accessible paths inside buildings

An accessible route from facility entrances is required to each accessible room, space, and element.

Vertical access between stories is required in most multi-story facilities, but exceptions are permitted for some non-governmental facilities under a certain size or number of stories.
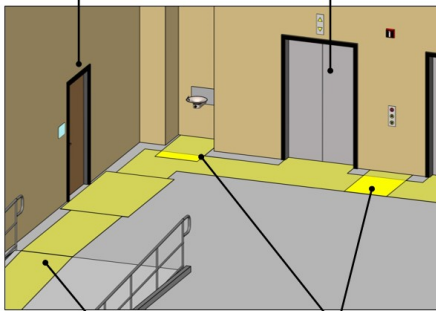
Accessible routes must serve each level on a floor required to be accessible. Vertical access can be achieved by ramps, curb ramps, elevators or, where permitted, platform lifts.

Accessible routes must connect to an unobstructed side of the clear floor space required at accessible elements.

What to look for

- Are passageways wide enough for a person using a wheelchair, walking frame or other mobility aid to turn or pass by someone else or are there regular passing spaces?
- Are automatic doors installed for high use entryways and passageways?
- Where automatic doors are not provided are the doors light and easy to open? Are door handles easy to use? Typically D shaped handles are easier to use than round handles.
- Are there visual markers, such as a colour-contrasting strip on glass doorways/ wall panels, such that these are rendered more visible?
- Are tactile indicators used to indicate surface changes?
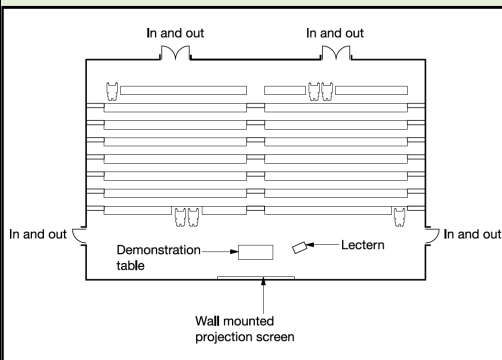- Are floor coverings slip resistant, smooth and secure?

What are some of the areas to consider in relation to accessibility on campus?

Area

- Teaching spaces

Diagram 13 An example of wheelchair spaces in a lecture theatre

What to look for

Lighting:
- Are teaching spaces well lit with minimal glare, particularly in areas where staff stand/sit to teach?

Hearing Support:
- Are the teaching spaces equipped with any of the following:
  - hearing loops
  - infrared hearing assistance (amplification) systems
  - or are FM systems available for loan to support people living with hearing impairments?
- Is there signage indicating the presence of any of the above? Is there information available about accessing the above?
- Information about working with a Sign Language interpreter.

Seating:
- In teaching spaces with fixed seating, are there spaces for people using wheelchairs available?

What are some of the areas to consider in relation to accessibility on campus?

Area

- Study Spaces

What to look for

- Are there quiet spaces available where students who may be impacted by noise and busy environments can have time out from the campus environment to rest or study?
- Is there adjustable or varying height furniture available in general study spaces?
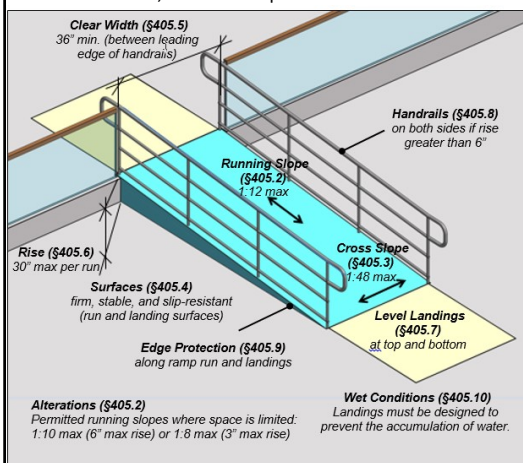

What are some of the areas to consider in relation to accessibility on campus?

Area

- Stairs, lifts and ramps

Clear Width (§405.5)
36" min. (between leading edge of handrails)

Handrails (§405.8)
on both sides if rise greater than 6"

Running Slope (§405.2)
1:12 max

Cross Slope (§405.3)
1:48 max

Rise (§405.6)
30" max per run

Surfaces (§405.4)
firm, stable, and slip-resistant
(run and landing surfaces)

Edge Protection (§405.9)
along ramp run and landings

Level Landings (§405.7)
at top and bottom

Alterations (§405.2)
Permitted running slopes where space is limited:
1:10 max (6" max rise) or 1:8 max (3" max rise)

Wet Conditions (§405.10)
Landings must be designed to prevent the accumulation of water.

What to look for

Where there are stairs do they have the following:
- continuous handrails,
- colour contrasting strips on the leading edge
- no open risers

Where there are lifts:
- Is the lift large enough to allow someone using a wheelchair or walking frame to enter and turn around to access the lift control panel?
- Do the lift buttons have raised tactile and Braille information next to them
- Are lift buttons at a height that can be reached by all?
- Does the lift provide audible information telling passengers what floor they arrived at?

Where there are ramps do they have the following:
- a gradual slope/incline (compliance of ramps can be checked by Property Services staff)
- handrails
- safety kerbs or kerb rails at the floor level
- level landings at regular intervals to allow people to rest
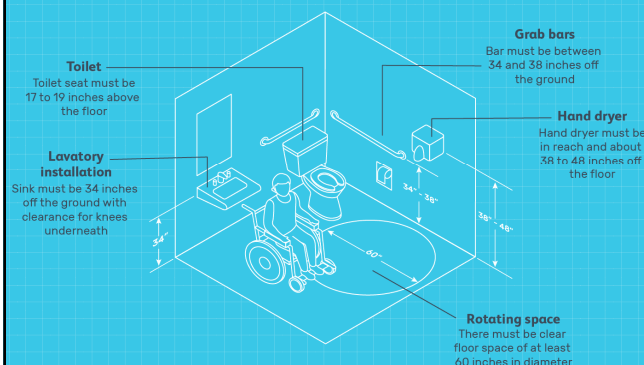- warning tactile ground surface indicators (TGSIs) at the top and bottom?

What are some of the areas to consider in relation to accessibility on campus?

Area

- Bathroom facilities

Accessible Bathroom Design Requirements

Grab bars
Bar must be between 34 and 38 inches off the ground

Toilet
Toilet seat must be 17 to 19 inches above the floor

Hand dryer
Hand dryer must be in reach and about 38 to 48 inches off the floor

Lavatory installation
Sink must be 34 inches off the ground with clearance for knees underneath

Rotating space
There must be clear floor space of at least 60 inches in diameter

What to look for

- Do accessible bathroom facilities have the following:
  - automatic or easy to open / close doors
  - sufficient circulation space to enter and turn around
  - sufficient space around toilet to accommodate left or right side transfers
  - equipment / facilities at appropriate heights e.g. grabrails, taps, mirror, hand dryers?
- Are there sufficient accessible bathroom facilities located in/near campus buildings such that people do not have to travel long distances to access these?
- Is there an accessible facility on campus with a hoist and changing table?
- Are there designated areas on campus for watering and toileting of assistance animals?

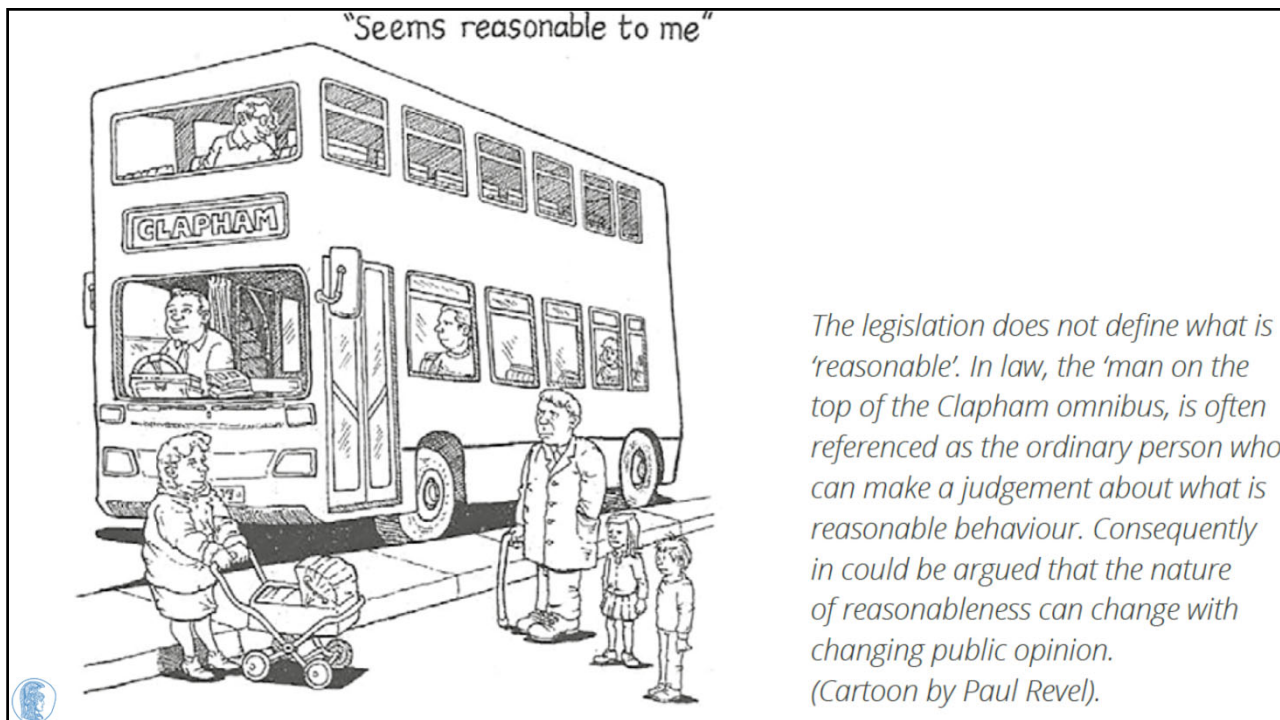## What is a reasonable adjustment?

- It is likely that the legislation left the definition of what is "reasonable" deliberately vague, so that over time a more rigorous approach could be taken without altering the primary legislation. This means that service providers have to make a judgement about what is reasonable.
- The courts, in interpreting the nature of reasonableness, are likely to take into account matters such as practicality and the extent of disruption involved in carrying out the work. The cost and the extent of the service provider's resources and expenditure to date plus the availability of grants will also be part of the assessment.
- The difficulty that disabled people face in accessing the services in question will obviously be pertinent.
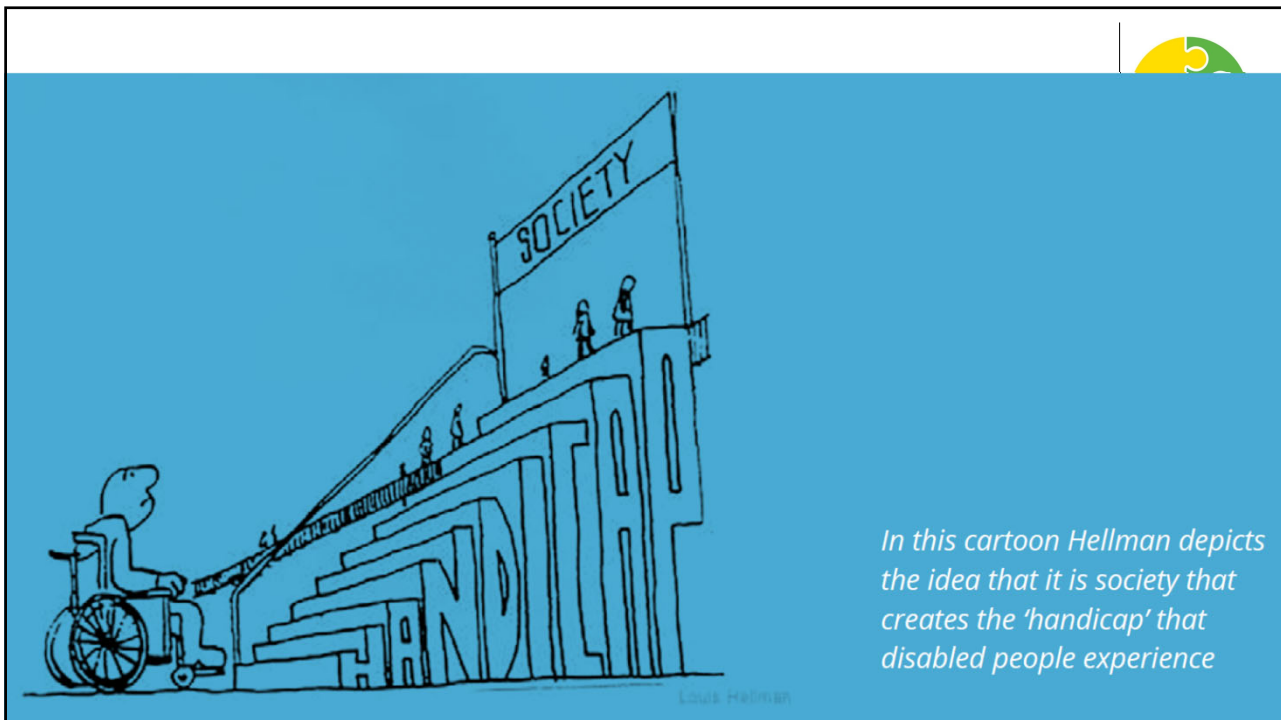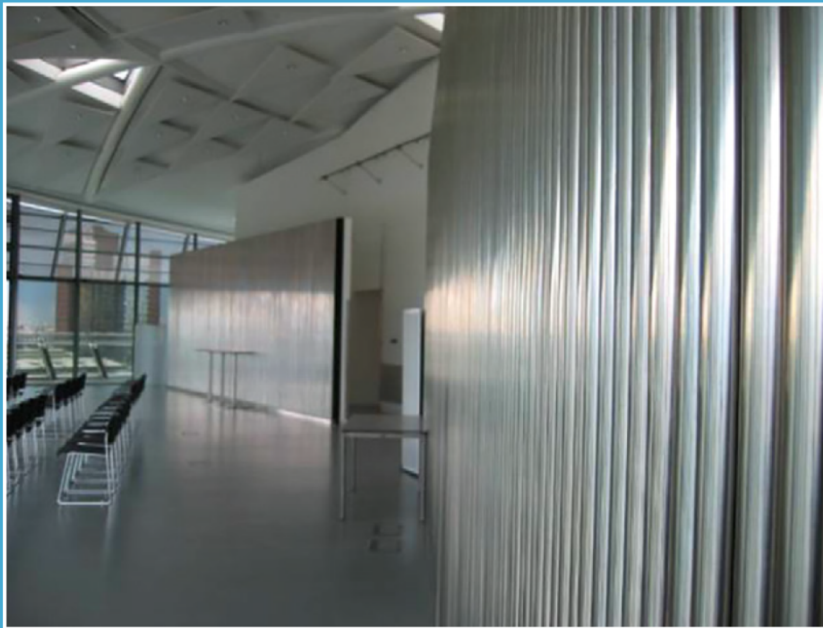
Does legislation work?

- In USA there is evidence that the courts are becoming more severe in their expectations of compliance than in the early years of the Disability Discrimination Act.
- The Act has been criticised because it places the responsibility for taking action against someone who discriminates (e.g. by failing to adapt a premises to enable access to the goods or service) on to the disabled person. This means that many disabled people feel unable to take action as they may be intimidated by the idea of taking legal action or be concerned about costs.
- It makes sense for service providers who are making alterations to premises to achieve the best possible solution to meet the needs of disabled people, preferably through consultation with service users. In this way they can future proof their premises to the maximum extent possible.

"Seems reasonable to me"

The legislation does not define what is 'reasonable'. In law, the 'man on the top of the Clapham omnibus, is often referenced as the ordinary person who can make a judgement about what is reasonable behaviour. Consequently in could be argued that the nature of reasonableness can change with changing public opinion.
(Cartoon by Paul Revel).

In this cartoon Hellman depicts the idea that it is society that creates the 'handicap' that disabled people experience

The symbol that denotes accessible facilities for the use of disabled people has been adopted throughout the world and as an image could not have been more successful. However, it does not convey the huge diversity of the disabled population and may even be the reason why many people visualise a wheelchair user when referring to a disabled person. The reality is very different with wheelchair users making up a small proportion of disabled people.

City Hall, London, Designed by Foster and Partners, 2002 for Greater London Authority.

This venue is easily accessed by wheelchair users and anyone with a mobility problem, but for visually impaired people the lack of colour contraast between walls and floor and the relections would be confusing. For hearing impaired the number of hard surfaces would be likely to cause confusing reverberations.

This signage, by including pictograms does explain its intentions quite well. It is sad that a relatively new building, The Tate Gallery in St Ives resulted in separate entrances for disabled users and parents with children.

It is important for designers to remember the mantra – Nothing about us without us – and develop the ability to really listen to people and act to secure designs that will meet wants and needs.

The lady in the foreground is 101 and her daughter – pushing the wheelchair is 78, but both were articulate and able to express their dissatisfaction with aspects of both the external and internal built environment.
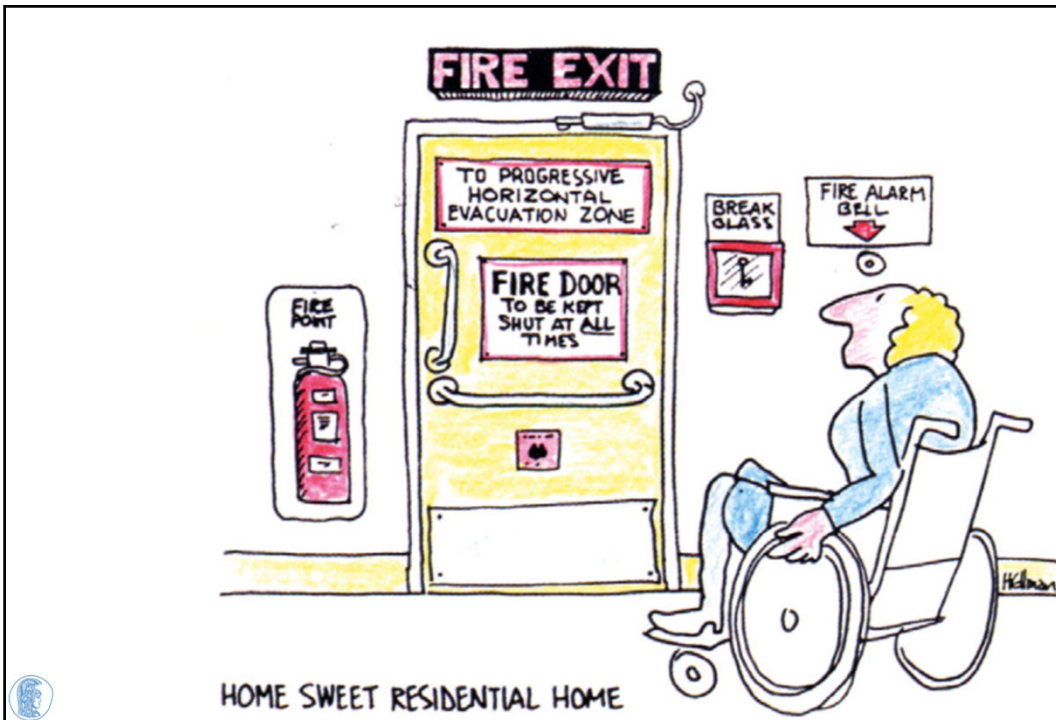
HOME SWEET RESIDENTIAL HOME

How can we influence and support our institutions to be truly accessible to people living with disability, long term illness and / or mental health conditions?

- Ensure that continuous improvement to accessibility of the built environment is specifically stated in the institution's Disability Action Plan (DAP). The DAP can serve as a meaningful and proactive planning tool to both demonstrate a commitment to, and provide accountability regarding identified issues, such as accessibility.
- Ensure that the institution conducts regular audits of accessibility compliance, with high impact issues prioritised, and recommendations for improvement resourced and implemented. This could be a named action in the DAP.
- Build collaborative relationships between Property Services, Disability Support and Human Resources teams on campus. This can:
    - support consultation with users - students, staff and visitors living with disability such that barriers to accessibility can be identified and acted upon in a timely manner.
    - create opportunities to influence and educate staff
- Encourage the institution to aim for best practice rather than compliance with standards where possible.

Last slide!

- While the goal is to move toward campuses and public spaces that are completely accessible for all, the reality is that it is an evolving process which is achieved incrementally by prioritising high use spaces or spaces frequented by staff or students who identify as living with a disability and planning new building work and renovations with **universal design** principles in mind.

Accessibility Unit
http://access.uoa.gr

D.2.2.1.2 training of the Univeristy Administration Services for Accessible Tertiary Education - Training of Built Environment Accessibility Consultants

Built environment accessibility Service

Ariadni Velissaropoulou

ariadni@uoa.gr

Project**: IDEA- Inclusive tertiary EDucation in the West BalkanS**
Reference Number: 618859-EPP-1-2020-1-AL-EPPKA2-CBHE-JP

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Accessibility and Universal Design

Aim	• Autonomous circulation and use off equipment in all aspects of everyday activities by everyone.
Based on	• Universal Design
Sight on	• Safety for all users • Dignity

3

Independent living
Freedom of choice or best possible personal accommodation?

4

Criteria of accessibility

- **Identification of places (am I at the right building?)**
- **Floor's quality**
- **Horizontality**
- **No obstacles, hazard prevention**
- **Sufficient Manoeuvre areas**
- **Passage free of obstacles**
- **Possibility to use commands (elevator button) / equipment's**
- **Signalization**
- **Comfort**
- **Evacuation**

5

SwD's Obstacles

+ Sensory Issues

| Orientation | Asking for information |
| Autonomous movement | Inaccessible environment |
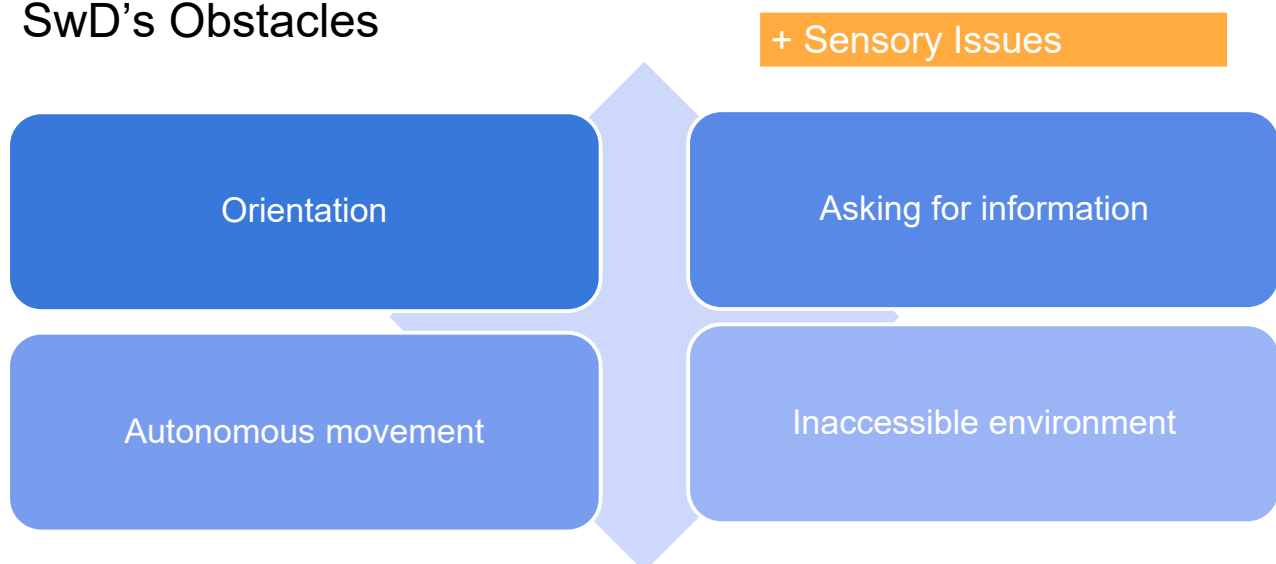
Environments': design, accessibility insufficiencies, mistakes or temporary obstacles

6

Mobility restrictions: who does it concern?

:

- Aging: reduced sight, mobility, cognitive abilities, temperature …
- Physical impairment: Wheelchair users (manual, electric, scooter) … or not (equilibrium, fatigue, reaching equipment) + communication
- Autism/psychosocial issues/medicine intake: communication/orientation/sensory
- Hearing loss: communication/orientation/sensory
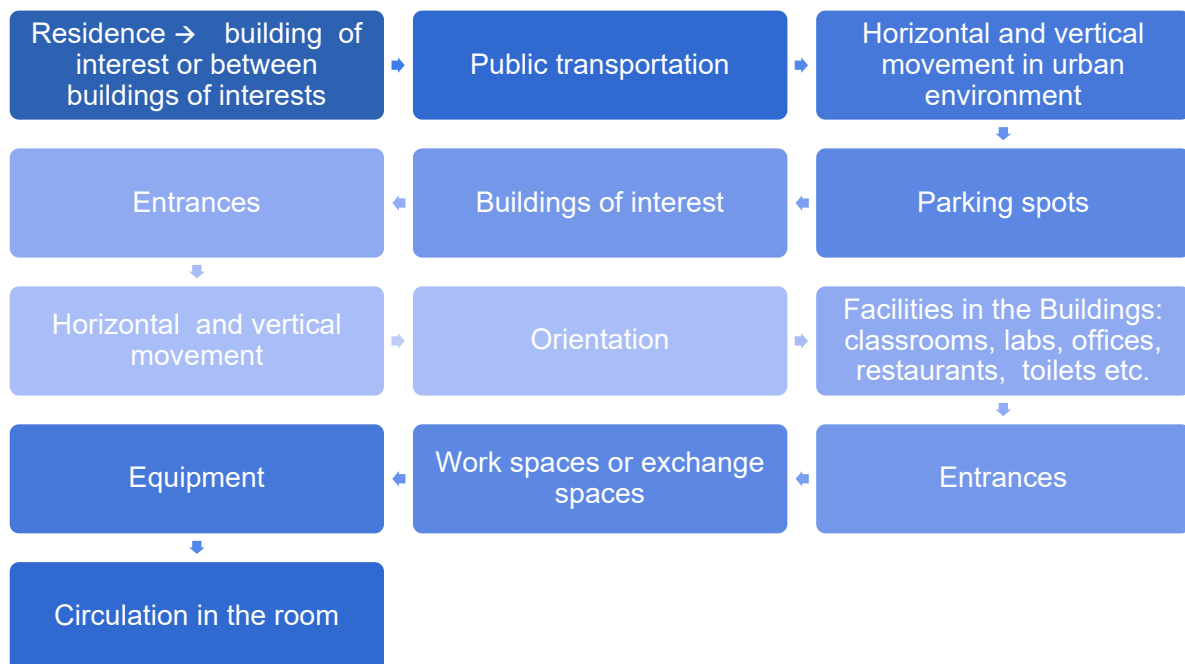- Sight loss/partial sigthloss (vision distortion)

Who
Why
How

7

SECU-E

S Stationing

E Enter

C Circulate

U Utilize

E Evacuate

ehttps://www.aviq.be/handicap/telechargement/logement-accessible.pdf
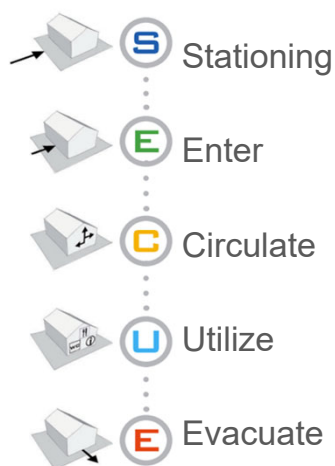
8

Concerned environment

Residence → building of interest or between buildings of interests	Public transportation	Horizontal and vertical movement in urban environment
Entrances	Buildings of interest	Parking spots
Horizontal and vertical movement	Orientation	Facilities in the Buildings: classrooms, labs, offices, restaurants, toilets etc.
Equipment	Work spaces or exchange spaces	Entrances
Circulation in the room		

9

Access to an accessible bathroom
Access to an emergency exit
Access to signalisation
Access to rest points
Comfort (automatization)
Access to interphones (alert)
Take into account technical aids (dog, electric wheelchair/scooter)
Protection of hazards (heating; temporary obstacles)

10

New Buildings

Existence of laws which grants accessibility
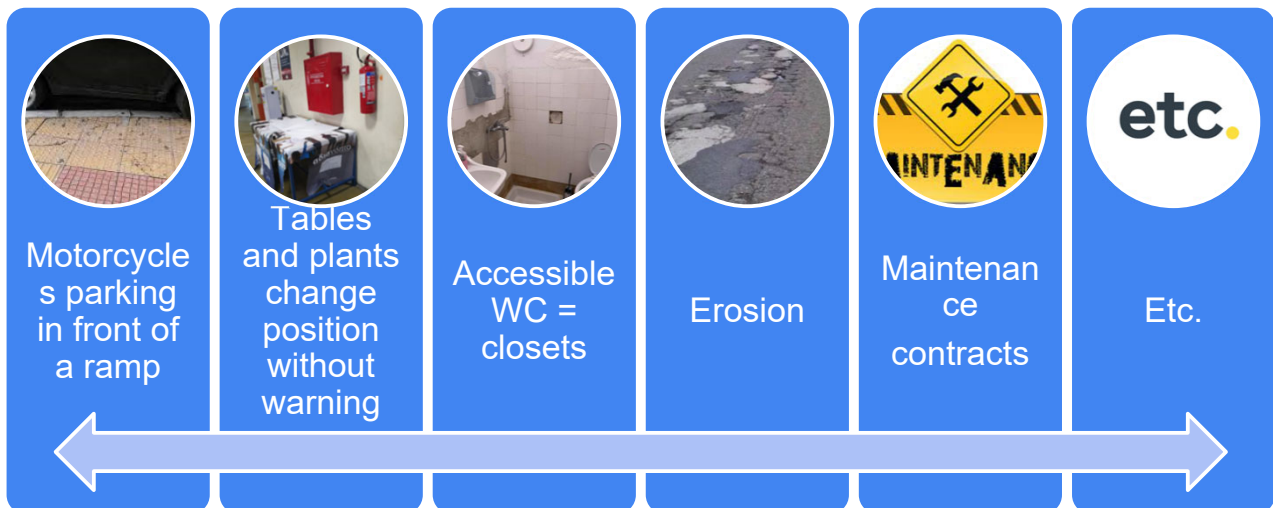
Cultural obstacles/mindset

Architectural studies:

- No courses on accessibility and universal design
- Professors tend to ignore accessibility rules
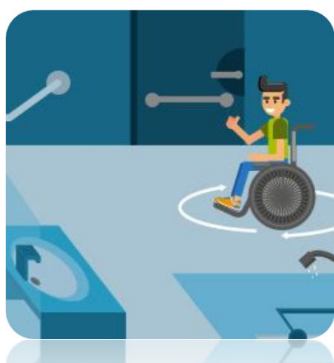

11
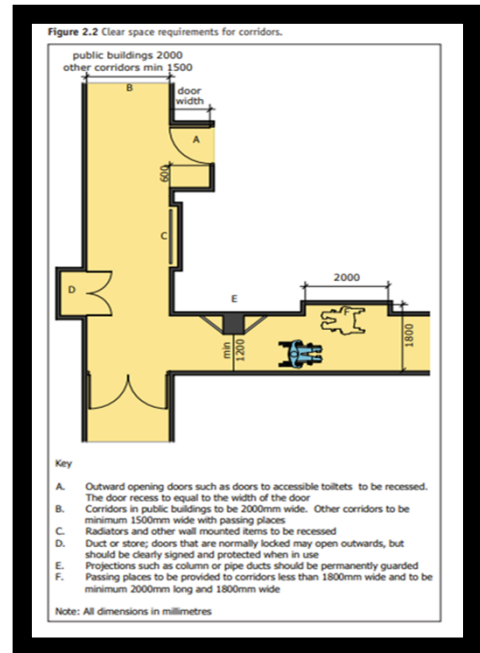
Existing built environment

Preserved buildings

Safety of all users

Assignment

Paperwork

Cost

12

Temporary obstacles

| Motorcycles parking in front of a ramp | Tables and plants change position without warning | Accessible WC = closets | Erosion | Maintenance contracts | Etc. |
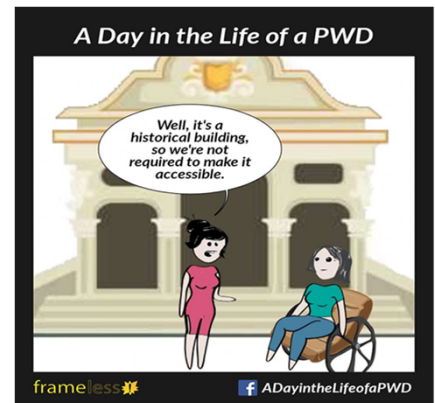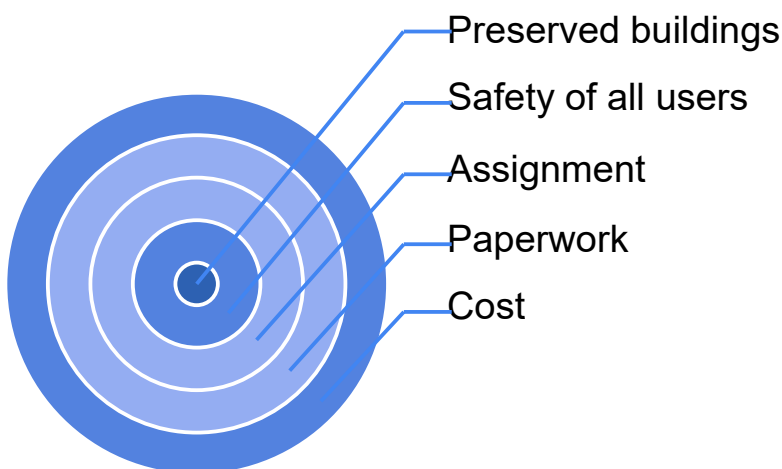
13

Ways to gather accessibility complaints/informations

+ Accessibility Recordings

Complaint forms

Activity and Participation Restrictions' Registration Form (ReF)

Personnel communication (telephone, mail, during a meeting)

Intervention of student's formal/informal groups

14

Built environment service

Financial aspects

Where is the money?

Structure

- 1 staff of accessibility unit
- 1 mechanical engineer
- 1 architectural engineer
- 1 director of engineer service
- Rector – President – Dean

15

Accessibility Unit: Complaint gathering and processing

Complaints gathering →
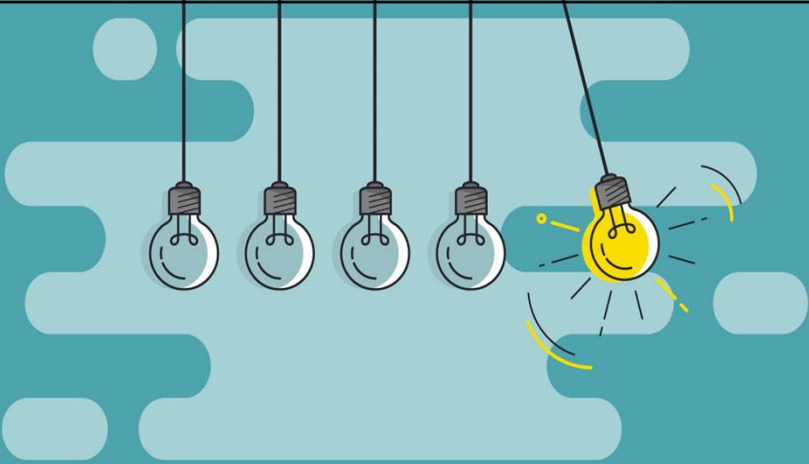
Official notification of:

- Rector
- Department's President or/and Faculty's Dean
- Technical service: 2 members (formal responsibility) + director (dispatch to other employees)
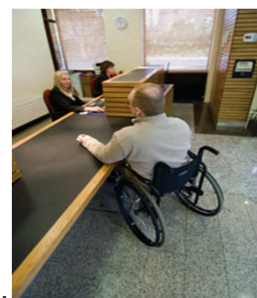
→ autopsy + intervention proposal + paperwork in collaboration with rector o president of the department or the dean of the faulty) + actions
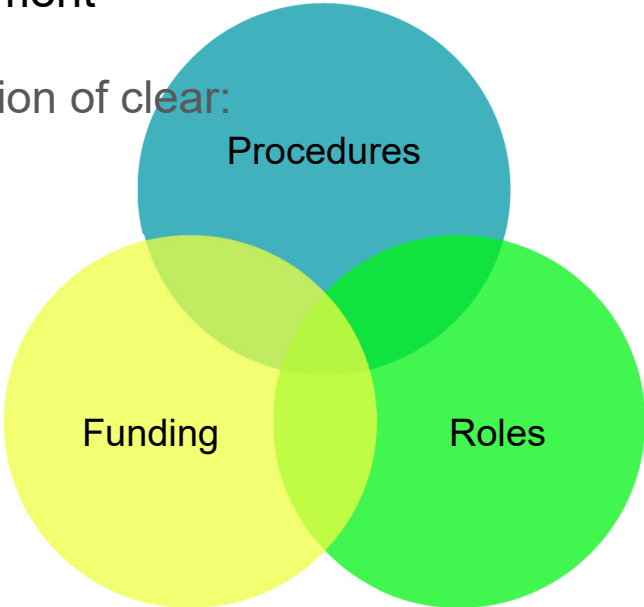
16

Solutions

17

Effective Issues management

In the higher level, definition of clear:

Procedures

Funding

Roles

/nature of the intervention

18

Services

Physical presence is important !

- Accessibility unit vans
- Video Relay Service
- Volunteer escort/guides (or note takers etc.)

Distance learning and exams

19

Finding alternatives

DIGNITY

be CREATIVE

- Change of classrooms (if possible. Difficult in huge institutions)
- Alternative trajectories
- Involve building's personnel: in each building: person of reference, key keeper, + access to elevators, WC, alternative entrances.
- Maintenance issues: consider exceptional use of elevators
- Provision of special equipment (long distances: possibility to use a small scooter)
- Mobile Ramps

20

Inform

- Accessibility guidebooks
- Maps (simplified / accessible)
- Accessible android application : orientation and temporary obstacles
- Compulsary courses in non accessible academic department (Decisions: Higher level)

  ○ Before admission and during studies)   → Internet application, Simplified maps / Mind maps for students with sight loss,

21

Technical bureau

- Obligation of a member of Technical bureau to
- Continuous training be trained (disability + laws + universal design + materials)
- check all the requirements are met on the plans AND on site

22

Note: Most of the later may also apply for people which cannot attend university because they live too far, need to be hospitalized or to be in a germ free environment.
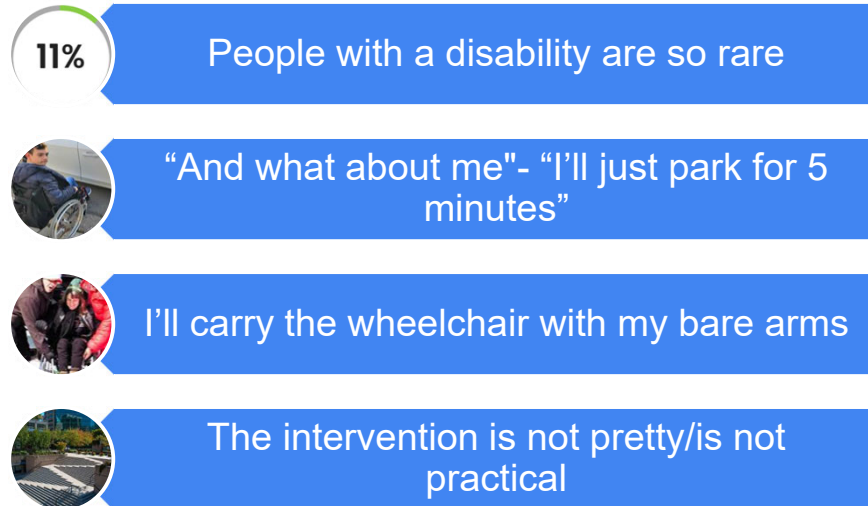
23

Service's Challenges

- Who will be the responsible of the intervention: the department? The uni? A program?
- I prefer to help them and to provide compensation than to make actual radical changes in the environment.
- I don't see the importance of involving an actual expert for the intervention.
- I have money for an accessibility intervention but I'll use wrong materials/technics.

24

Existing mindset

11%   People with a disability are so rare

"And what about me"- "I'll just park for 5 minutes"

I'll carry the wheelchair with my bare arms

The intervention is not pretty/is not practical

25

Change the world

Information campaigns (volunteers' training)
Mobilize volunteers

It's your turn to change the world

26

Thank you!

Accessibility Unit
http://access.di.uoa.gr

Built Environment Accessibility Videos
Dr Alexandros Pino
Laboratory Teaching Staff NKUA

HELLENIC REPUBLIC
National and Kapodistrian
University of Athens
Department of Informatics and Telecommunications
Division of Communications and Signal Processing
Speech and Accessibility Lab

Co-funded by the
Erasmus+ Programme
of the European Union

Concordia University – Montreal, Canada

- This set of training modules is anchored in best practices to support participants in building more inclusive and accessible courses.

- The modules/tutorials range in duration from 10 to 30 minutes. Note all the modules include accessible features and, to ensure more successful compatibility with assistive technology, information is paced accordingly and broken down into multiple slides.

- Please watch the module pinned on our next slide (watch module slides from 5 to 20) to learn about **Universal Design**.

UNIVERSITÉ BISHOP'S UNIVERSITY   CÉGEP À DISTANCE   UNIVERSITÉ Concordia UNIVERSITY   DAWSON COLLEGE   McGill UNIVERSITY
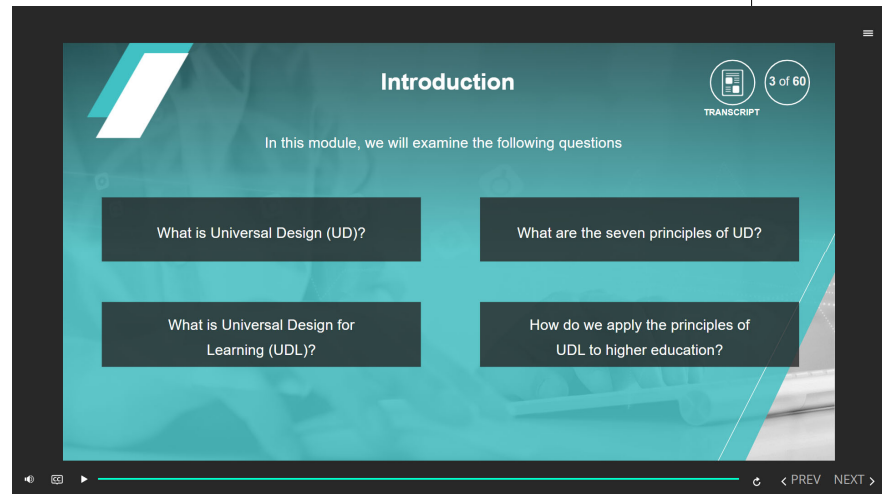
Universal Design

[LAUNCH MODULE](#)

and watch module slides from 5 to 20

Projects meet…

- [United World Project](#): Let's reflect together on the culture of accessibility and share experiences on how to build a world without any architectural, technological, cultural, or social barriers that may exclude many people from fully participating in society.

- [eastin](#)
  - The Global Assistive Technology Information Network
  - The worldwide search engine on Assistive Technology
  - Some of the best known, expert information providers worldwide have joined together to create the biggest, most comprehensive information service on assistive technology (AT) serving older and disabled people, their families and carers across the globe.
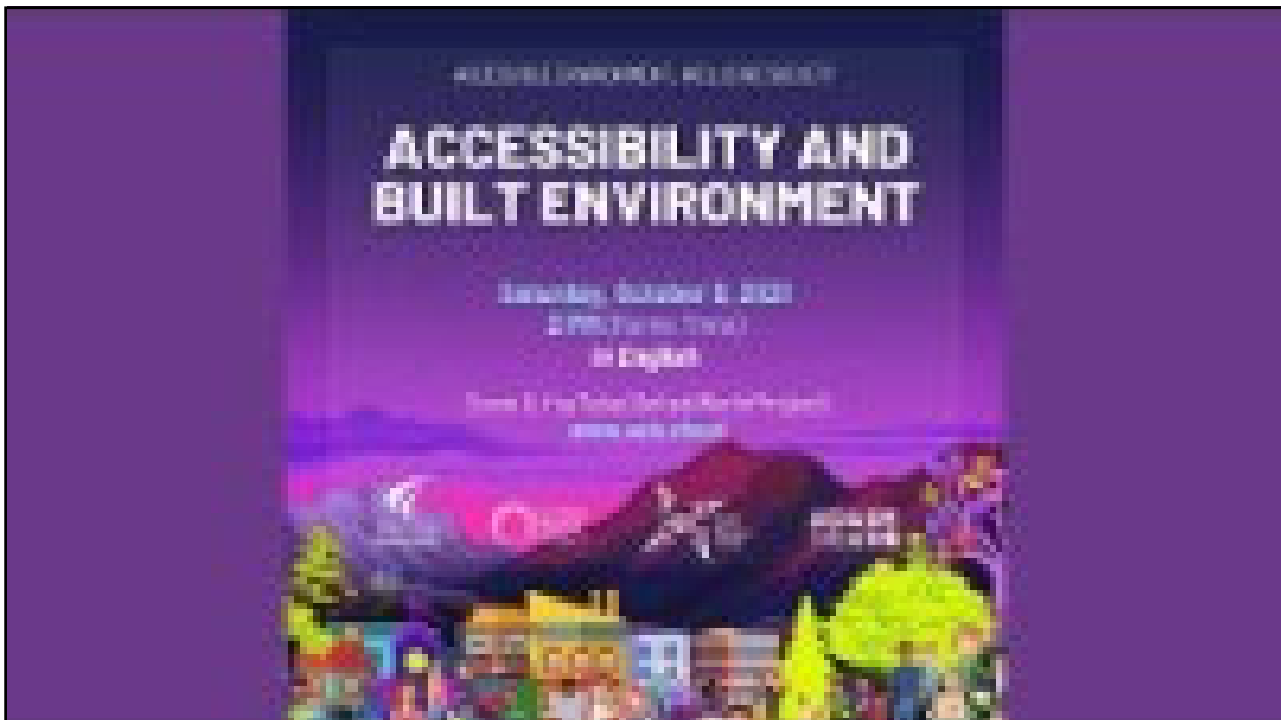
Centre for Excellence in Universal Design – Dublin, Ireland

● The Centre's work on Universal Design for the Built Environment involves conducting original research and developing design recommendations for use by professionals on a wide range of building types and spaces, including homes, shared spaces, and educational campuses. All their research and guidance is available to download for free from http://universaldesign.ie/Built-Envir....

Progressive AE – MI, USA

- Progressive AE is an expert in creating buildings and spaces that meet the principles of Universal Design. They designed and built the Mary Free Bed YMCA, the first building in the world to receive certification in Universal Design from the Global Universal Design Commission. When it comes to architecture and design, universal design is helping make buildings and spaces more accessible to a wider range of people.
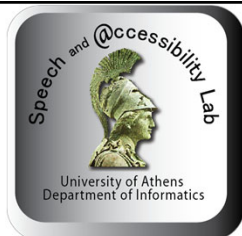
Thank you!
Dr Alexandros Pino, PhD, MSc, EE
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https://speech.di.uoa.gr

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