

# Cognitive accessibility of mobile ICT

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# Outline

- Cognitive disability
  - Benefits of ICT access to people with cognitive disabilities
  - Active working on accessibility of mobile ICT
  - Personal point of view
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# Cognitive disability

- A **cognitive disability** is generally understood as the limitations or challenges that a person has by performing one or more types of cerebral tasks.
  - Some difficulties that they have to face are:
    - Difficulties with memory
    - Comprehension
    - Reading
    - Attentiveness
    - Others...
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# Benefits of ICT access to people with cognitive disabilities

- As time and technology have progressed, the access to communications has become a necessity.
  - Smartphones, tablets or web applications have become essential in every aspect of our lives.
    - Education
    - Employment
    - Social interaction
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## Some examples of the benefits

- People that has dementia or Alzheimer can be assisted by providing daily reminders.
  - For those children that have attentiveness difficulties, mobile ICT can be a critical tool of learning.
  - The accessibility to the ICT can improve the employment of people with cognitive disabilities.
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## Active working on accessibility of mobile ICT

- Currently, there are not many organizations that actively work on this specific issue.
- There is a lot of work focused on accessibility of mobile ICT but not addressing the issue of cognitive accessibility.
- Some organizations are currently working on it:



ISO is currently working on two standards related to cognitive accessibility on mobile ICT:

### **ISO / DIS 21801**

which deals with general guidelines on cognitive accessibility

### **ISO 21802**

regarding support products and their guidelines on cognitive accessibility

Both are in the development phase of its first edition, but its proposed for publication in January 2019.

## **ISO Organization**

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ETSI created a specialized working group on this topic in 2015.

### **ETSI TR 103 349**

Functional needs of people with cognitive disabilities by using mobile ICT devices for a better user experience in mobile ICT devices.

### **EG 203 350**

Guidelines for the design of mobile ICT devices and their related applications for people with cognitive disabilities

## **ETSI Organization**

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The Standards People



Also W3C created a specialized working group on this topic.

**W3C: Cognitive  
Accessibility User  
Research**

**W3C: Mobile  
Accessibility Task  
Force (Mobile A11y  
TF)\***

\*This document provides accessibility guidance on mobile devices. Although cognitive difficulties may be taken into account in some of its guidelines

## W3C Organization

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# Usability testing

## **W3C: “Making Content Usable for People with Cognitive and Learning Disabilities”**

- The main goal of this document is to provide ways of how to do usability testing: the main differences from usability testing between general population and cognitive accessibility testing.
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## Personal point of view

- Cognitive disability is very diverse since it affects many functionalities.
  - A part of the population can not have the same benefits as the rest of the people.
  - Mobile devices are almost an essential in fundamental aspects of our life such as education, work or even social relations.
  - The majority of accessibility is focused on motor or physical disabilities. There is a lot of work to be done.
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**Thank you for your attention**

**Cognitive accessibility of mobile ICT**

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