



**United  
Nations**

Department of  
Economic and  
Social Affairs



## Commemoration of the International Day of Persons with Disabilities - IDPD

### **Reducing Inequalities Through Technologies: A Perspective on Disability Inclusive Development**

December 3, 2021 - 8:00 to 9:30 am (NY time)

#### Concept Note

co-organized by the World Intellectual Property Organization, the International Telecommunications Union, and the United Nations Department for Economic and Social Affairs

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One billion persons with some form of disability can benefit from assistive technologies that can facilitate their social, economic and political engagement, including their participation in decision-making processes that affect their lives and ambitions for sustainable development. Persons with physical, sensory, cognitive/learning or invisible disabilities represent nearly 15% of the world population with a higher prevalence in developing countries. The number of persons with a disability is expected to reach 2 billion by 2050.<sup>1</sup>

Accessibility and usability are increasingly enabled by technology and innovation. The Convention on the Rights of Persons with Disabilities (CRPD) adopted in 2006, acknowledged this reality by recognizing access to assistive technologies as a human right. Inclusion and accessibility for persons with disabilities is also recognized in the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs), including in relation to poverty reduction (SDG 1), education (SDG 4), growth and employment (SDG 8), reducing inequalities (SDG 10), and sustainable cities and human settlement (SDG 11). Underpinning all the Sustainable Development Goals, science, technology and innovation play a crucial role in supporting disability inclusive sustainable development, and in ensuring that no one is left behind. The Covid-19 pandemic has shone light on additional challenges for persons with disabilities and revealed how critical technologies and accessibility are to mitigating impacts and building resilience during such unprecedented times.

For some kinds of disabilities, assistive devices/technologies are key “equalizers” that promote inclusion and full participation in all industries and dimensions of life from education to

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<sup>1</sup> <https://www.worldbank.org/en/topic/disability>

employment, to leisure, culture, travel, sport, media, politics, to name a few. In all these sectors there are also persons with disabilities in positions of leadership. For many, assistive technologies are powerful enablers facilitating their performance. Ranging from simple devices, such as a walking stick or reading glasses, to more complex technologies such as assistive robots or gesture or emotion recognition software, assistive technologies are not just game changers for persons with disabilities but, with an increasingly ageing population, many older persons can also benefit from these technologies. Indeed, many innovations initially designed for persons with specific needs have been adapted for use in larger markets through a wider array of new consumer goods to address either human limitations affected by older age, or global population needs and applications, including in communication, health, lifestyle and entertainment. Assistive technologies are an important complement to universal design, designing products and built environments so that they are aesthetic, accessible and useable to the greatest extent by everyone.

Nevertheless, the development of assistive technologies is a complex process that relies on many factors. Of particular importance is the existence of an innovation ecosystem that incentivizes researchers, technologists, creators to find technical solutions to improve the lives of persons with disabilities and/or older persons, and to attract the necessary investments for the technological breakthroughs not just to happen but also to be brought to the end user. Key to such innovation ecosystem is Intellectual Property. IP provides an incentive structure for creativity, technologies and innovation to see the day and in doing so enable the growth of the assistive technologies industry.

Given the critical importance of this industry and its contribution to supporting inclusive societies, the World Intellectual Property Organization (WIPO) dedicated this year's flagship publication *Technology Trends* to the topic of Assistive Technology. The report identifies innovation in well-established assistive products, such as autonomous wheelchairs, hearing aids and wearables monitoring health and emotion that alleviate the impact of human limitations, as well as emerging and cutting-edge solutions, exploring how close the latter ones are to commercialization, and other factors that play a role in them entering the market. The report also makes available interactive dashboards on conventional and emerging assistive technologies, allowing stakeholders to look at specific information of interest – such as top patent applicants and access related patent documents - and emerging assistive technology readiness radar. WIPO's work intends to contribute to the creation of a knowledge basis on the IP landscape that applies to this field of technology and support informed discussions and decision-making on this agenda.

The issue of accessible technologies for persons with disabilities and specific needs is also highlighted in the annual World Summit on the Information Society (WSIS) Forum. It is crucial that information and communication technologies (ICTs), including assistive technologies, be

available, accessible, and affordable for all. WSIS and its stakeholders initiated a special track on *ICTs and Accessibility for Persons with Disabilities and Specific Needs* that provides space for discussions and constructive dialogues to mainstream accessibility in all the technologies. This special track covers a range of topics on innovative technologies for persons with disabilities to ensure inclusiveness and equality.

It is against this background and to mark the 2021 International Day of Persons with Disabilities held under the theme of “Leadership and participation of persons with disabilities toward an inclusive, accessible and sustainable post-COVID-19 world” that this event finds context. The event aims at increasing awareness of the importance of supporting innovation ecosystems to spur the development of new and improved assistive technologies; promote understanding of the workings of the assistive technologies industry; and share insights on the landscape and global trends in this cluster of technologies as a complement to universal design. The event will also highlight select initiatives by members of the UN family to support informed discussions relating to the realization of the objectives of the CRPD and the 2030 Agenda for Sustainable Development.

This event is also held as part of the WSIS TalkX series and is closely linked to the WSIS Action Lines – where accessibility is a cross-cutting topic – and the Sustainable Development Goals.