Preconditions to Inclusion Issues Paper:

# Assistive Technology

*The development of these issues papers has been funded by the Australian Government through the Department of Foreign Affairs and Trade, with technical support from CBM Australia Inclusion Advisory Group. The views expressed in this publication are the Pacific Disability Forum’s alone and are not necessarily the views of the Australian Government*

## What is assistive technology in the Pacific?

Assistive technology (AT) is an umbrella term for assistive products and devices, together with their related systems and services, that increase, maintain, or improve the functional capabilities of individuals with disabilities. It can comprise physical products or information and communication technology (ICT) such as digital devices. Assistive products and devices encompass any item, piece of equipment, or product system, whether commercially available, modified, or customised, that is used for the purposes mentioned above. These can include wheelchairs, white canes, prosthetics, walkers, glasses, screen readers, Braille and more. Assistive services are essential for access to and delivery of these products and devices, and include referral, fitting, training, maintenance and repair of assistive products or devices. AT assists impairments across all functional domains, including cognition, communication, hearing, mobility, self-care, and vision. Access to AT is a human right and a precondition for equal participation and opportunities.

## Role of assistive technology as a precondition in the Pacific

The Pacific Disability Forum (PDF) identifies AT as a precondition to inclusion for persons with disabilities in the Pacific. It plays a crucial role in promoting independent living for individuals with disabilities, allowing them to perform daily tasks, engage in education and employment, and participate actively in their communities. AT facilitates and promotes the inclusion, participation, and engagement of any person with functional limitations. Increasing people’s access to AT is a critical enabler necessary to meet the Sustainable Development Goals (SDGs) and to realize the rights of persons with disabilities enshrined in the UN Convention on the Rights of Persons with Disabilities (CRPD). Some groups of persons with disabilities are more likely to need AT than others. These groups include children and adults with disabilities, older people and people who have been injured or who have acute or chronic health conditions and those with high support needs.

AT empowers persons with disabilities in any setting, including the workforce, education, health services, and community engagement, allowing them to be more independent. It facilitates communication, enhances inclusivity in training and learning environments, supports mobility and promotes independent living. For example, a comprehensive review across ten countries found that assistive technologies and devices used by students with disabilities in higher education had substantial positive effects on their academic engagement, psychological well-being, and social participation (McNicholl, Casey, Desmond, & Gallagher, 2021). The provision of AT is often organised under the health sector and is a component of universal health coverage. However, it also is essential for enabling multisector participation, including education, economic development, health services and disaster risk reduction and responses. As the preconditions are all interlinked, AT also cuts across these: for example, AT is often more effective when environments, services and communications are more accessible, and support services have a role to play when persons with disabilities still face barriers to inclusion that are not met through AT and accessibility.

## Assistive technology under the CRPD

The CRPD recognises the importance of AT and in article 4(1)(f) points to the role of state parties in enabling persons with disabilities to live independently and participate fully in all aspects of life in their respective communities. State parties do this through ensuring the availability and affordability of assistive devices, including in Article 9 regarding accessibility to ICT and systems, which often involve the use of AT. In Article 20, CRPD guides state parties to take effective measures towards the independence of persons with disabilities by facilitating the provision of assistive devices and technologies. In Article 26, CRPD promotes the rights of persons with disabilities to habilitation and rehabilitation services, which may include access to AT to achieve meaningful inclusion and participation in society. Finally, on international cooperation in Article 32, state parties promote access to AT for persons with disabilities, which is particularly important in the Pacific, where such resources are limited.

## Current status of assistive technology in the Pacific

The PDF estimates that there are 1.708 million persons with disabilities in Pacific Island Countries and Territories (PICTs), many of whom have AT needs. Additionally, population health in PICTs is characterised by a high and growing prevalence of non-communicable diseases (NCDs). The older population is expected to increase to over 2.2 million by 2050, with 88 percent of the increase in Melanesian countries. Between 2006 and 2016, PICTs saw a greater than 50 percent rise in strokes, 35 percent increase in cardiovascular disease, 16 percent increase in respiratory disease and more than 13 percent rise in diabetes. This health and demographic profile of the Pacific indicates a significant and growing need for AT with a high rate of diabetes, but currently this demand is far from being met. The WHO and UNICEF Global Report on Assistive Technology (2022) [[1]](#footnote-2) estimates that 2.5 billion people need at least one assistive product and that this number will grow to over 3.5 billion by 2050. In addition, the report reveals a significant disparity in access to assistive products across the globe, with less than 3 percent of people in some low-income nations having access to them, compared with 90 percent in some high-income countries.

At the Pacific regional level, PDF, in collaboration with the Fiji Disabled Persons Federation (FDPF), the Fiji National Disability Council for Persons with Disabilities (FNCPD), and the Spinal Injury Association (SIA), and other partners are contextualising the WHO Assistive Product List. The contextualisation is intended to guide the procurement of assistive products and gain support from PICTs to regionalise the list.

In Fiji, at a smaller scale, several churches and charitable organisations, services and the Ministry of Health, provide AT to targeted individuals. Fiji’s SIA is the only known Organisation of Persons with Disabilities (OPD) that distributes AT to individuals and communities on a larger scale. Private donors, including Physio Net UK, are donating these technologies with funding from the Vodafone Foundation.

The WHO *Pacific Assistive Technology Procurement Study[[2]](#footnote-3)* explored options for improving procurement and service delivery of AT in the Pacific context. The study findings provided three overarching recommendations: establishing a Pacific AT resource facility, setting up an AT supply chain hub, and strengthening national AT services and workforces within health systems. The implementation of these recommendations is in progress under the New Zealand Ministry of Foreign Affairs and Trade (MFAT) funding to WHO in 2023.

In 2018, the Western Pacific Ministers of Health Meeting endorsed the Western Pacific Regional Framework on Rehabilitation, which emphasises rehabilitation and AT to address unmet needs through greater investments, regional collaboration, and improved data and information.

## Key issues for assistive technology in the Pacific

* Overall, the availability, choice, affordability and quality of AT in the Pacific is very limited.
* Information about AT needs to be available and easier to access, and public awareness about AT needs to improve.
* Users of AT need to be more included in decision-making about it, as well as being provided with greater choice and the means to exercise choice.
* To ensure persons with disabilities can access AT, schemes should be established to subsidise these or otherwise address barriers to affordability.
* There is a strong need for PICTs, in collaboration with other relevant stakeholders, to set and regulate standards to maintain quality of products and services.
* Historically, there has been a lack of effective regional collaboration in this area. Addressing this could enhance progress across the region.
* Supply of assistive products and devices is a critical issue. There need to be concerted efforts to apply principles of commercial procurement and logistics to this at regional scales, as well as addressing supply chains at national levels.
* As well as addressing procurement and supply chains, it is also critically important that PICTs strengthen assistive services, to ensure that assistive products and devices can be appropriately accessed by persons with disabilities. Without addressing this, increased procurement and supply will not be met with systems for delivery, fitting, maintenance and repair of AT, which could mean that some persons with disabilities are left behind, or that persons with disabilities even encounter harm, through being provided with inappropriate AT without the follow-up services required. Workforce planning is a critical aspect of this.

## Further resources:

Brentnall, L., Kuambu, A., & Mines, R. (2023). [**Scaling up access to assistive technology in the Pacific.**](https://devpolicy.org/scaling-up-access-to-assistive-technology-in-the-pacific-20230927/)*Development Policy Centre*.

McNicholl, A., Casey, H., Desmond, D., & Gallagher, P. (2021). [**The impact of assistive technology use for students with disabilities in higher education: A systematic review.**](https://doi.org/10.1080/17483107.2019.1642395)*Disability and Rehabilitation: Assistive Technology, 16*(2), 130–143.

1. World Health Organization (WHO) 2022, [*Global report on assistive technology*](https://www.who.int/publications/i/item/9789240049451), WHO, Geneva. [↑](#footnote-ref-2)
2. World Health Organization (WHO), 2022[. Assistive Technology Procurement Study](https://www.who.int/publications/i/item/9789290619178): Technical Report. WHO Regional Office for the Western Pacific. [↑](#footnote-ref-3)