



Government of Sierra Leone

National Assistive Technology Procurement Guidelines of Sierra Leone

March 2023

Ministry of Health and Sanitation

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Foreword



Reading the Assistive Technology procurement guidelines of Sierra Leone, I realize the incredible work that has gone into developing a comprehensive previously non-existent landscape for the provision of Assistive Technology (AT) products and services for the most vulnerable members of our society. One of the wishes of the Government of Sierra Leone is to ensure that the country is inclusive for people with disabilities as clearly expressed in the Midterm National Development Plan (MNDP 2019 to 2023). This is also in line with many other frameworks including the Ministry of Health and Sanitation's three key priority areas of Universal Health Coverage (UHC), Sustainable Development Goals (SDGs), and Equity. As stated in the UHC, every individual and community, irrespective of their circumstances, should have timely access to the high-quality health services they need without risking financial hardship. Attainment of the SDGs requires the empowerment of communities to participate in the design, planning, implementation, monitoring and evaluation of interventions that improve their health outcomes. Communities should also receive feedback from respective duty bearers for their affirmative actions. Equity ensures that the needs of all people living in Sierra Leone are addressed in an equitable manner irrespective of one's ethnicity, gender, age, disability, religion, political belief, geographical location, or economic and/or other social conditions. In addition, as Minister of Health and Sanitation, I welcome these procurement guidelines which seek to standardize the procurement process of AT products for Sierra Leone. They will also contribute to ensuring equitable access to AT products and services and ultimately improve the quality of life of persons with disabilities.

Dr. Austin Demby

Minister, Ministry of Health and Sanitation

Acknowledgements



The National Assistive Technology Procurement Guidelines of Sierra Leone were developed by the Clinton Health Access Initiative under the AT2030 programme's Country Investment Fund. The AT2030 program is funded by UK Aid from the UK government and led by the Global Disability Innovation (GDI) Hub. We want to acknowledge and thank members of the AT standards subgroup and the Technical Working Group for their dedicated effort and technical support. We wish to acknowledge the support of Dr. Santigie Sesay (Director of NCDs, Mental Health and Rehabilitation), Mr. Ismaila Kebbie (National Programme Manager for National Rehabilitation Center), Mr. Francis Kabia (Director of Welfare Ministry of Social Welfare), Mr. Jonathan Conteh (Regional Coordinator for National Commission for Persons with Disability), Mr. Santigie Kargbo (President of Sierra Leone Union on Disability Issues) for their tireless support in the successful completion of this document.

We also wish to thank all the stakeholders in the disability community and other contributors in Sierra Leone who made the development of the National Assistive Technology Procurement Guidelines of Sierra Leone possible.

This project is part of AT2030, a programme funded by UK Aid and led by the Global Disability Innovation Hub. AT2030 will test 'what works' to improve access to AT and will invest £20m to support solutions to scale. With a focus on innovative products, new service models, and global capacity support, the programme will reach 9 million people directly and 6 million more indirectly to enable a lifetime of potential through life-changing assistive technology. More information at AT2030.org.

A handwritten signature in blue ink, consisting of stylized, overlapping letters that appear to be 'S' and 'K'.

Dr. Sartie Kenneh
Chief Medical Officer (CMO)
Ministry of Health and Sanitation

Acronyms and abbreviations

APL	Assistive Products List
AT	Assistive Technology
BPEHS	Basic Package of Essential Health Services
CHAI	Clinton Health Access Initiative
CRPD	Convention on the Rights of Persons with Disabilities
FCDO	Foreign, Commonwealth & Development Office
GDI	Hub Global Disability Innovation Hub
ICF	International Classification of Functioning
Incoterm	International Commercial Terms
LMIC	Low and middle-Income Countries
MTNDP	Mid-Term National Development Plan
MDAs	Ministries, Departments and Agencies
MoHS	Ministry of Health and Sanitation
NDATR TWG	National Disability, Assistive Technology and Rehabilitation Technical Work Group
NHP	National Health Policies
NCDs	Non-Communicable Diseases
PwDs	Persons with Disabilities
PHC	Population and Housing Census
SDG	Sustainable Development Goals
UNCRPD	UN Convention on the Rights of Persons with Disabilities
UHC	Universal Health Coverage
WHO	World Health Organization

Glossary/Definition of Terms

Disability is an evolving concept resulting from the interaction between persons with impairments and attitudinal and environmental barriers that hinder full and effective participation in society on an equal basis with others.

Persons with Disabilities include people who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

Assistive Technology is a subset of health technology that refers to assistive products and related systems and services developed for people to maintain or improve functioning and thereby promote well-being.

Hearing aid is a small electronic device that you wear in or behind your ear. It makes some sounds louder so that a person with hearing loss can listen, communicate, and participate more fully in daily activities. A hearing aid can help people hear more in both quiet and noisy situations.

Mobility impairments: refer to a broad range of disabilities which limit functions of moving in any of the limbs, or in fine motor ability.

Vision impairment means that a person's eyesight cannot be corrected to a "normal" level. Vision impairment may be caused by a loss of visual acuity, where the eye does not see objects

The United Nations Convention on the Rights of Persons with Disabilities is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities as clearly as usual.

1. Introduction

1.1 Background

Disability is an evolving concept resulting from the interaction between persons with impairments and attitudinal and environmental barriers that hinder full and effective participation in society on an equal basis with others. Persons with Disabilities include those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. According to World Health Organization (WHO), more than one billion people in the world live with some form of disability, however, only one in 10 people in need globally have access to the necessary and appropriate assistive products today. This is due to aging populations and the higher risk of disability in older people as well as the global increase in chronic health conditions such as diabetes, cardiovascular disease, cancer, and mental health disorders. This is also primarily due to high out-of-pocket costs, a lack of resources in general (funding for assistive technology programs, service provision, and the cost of assistive products), or a lack of specific national programs including systems for procuring assistive products, accessories, spare parts, and related services.

There exists a significant gap between needs and access to AT products as shown in figure 1. The demand for AT devices would continue to wide to two billion by 2050 with the rise of the population needing AT devices.

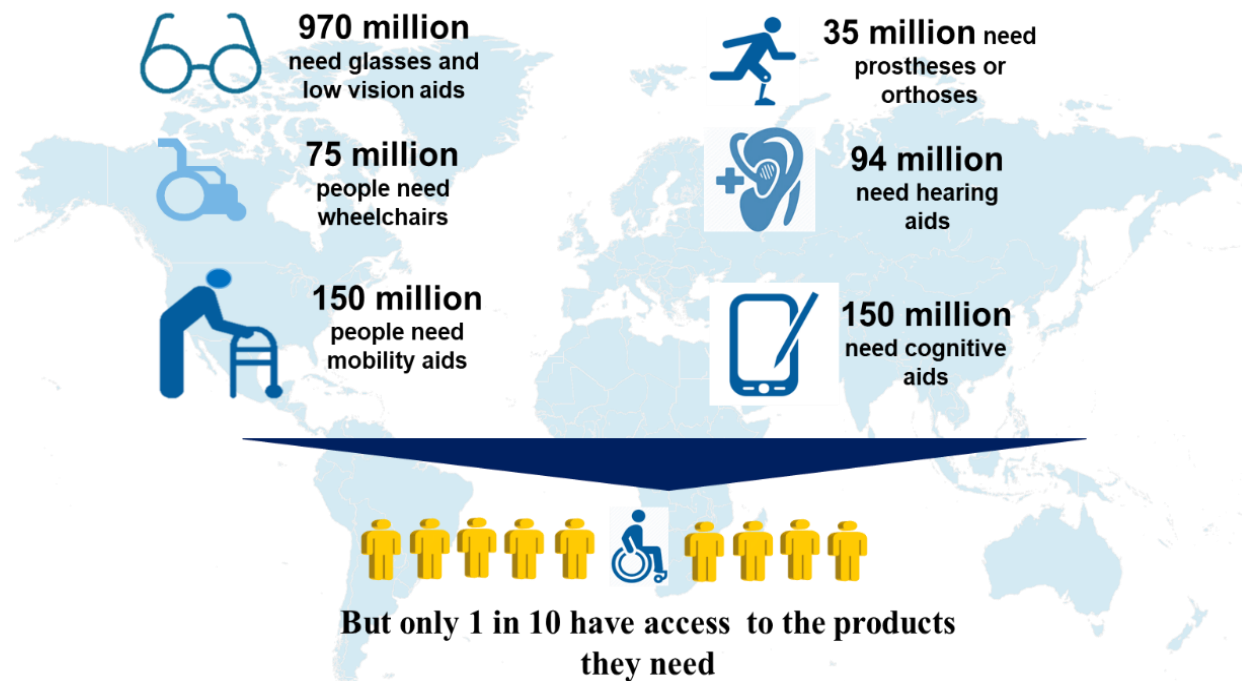


Figure 1- Disability Gap

To perform their daily activities, people with disabilities benefit from Assistive Technology. The use of AT, however, is only helpful if the AT is readily accessible and meets the user's needs, and lifestyle. As per WHO, Assistive Technology a subset of health technology refers to assistive products and related systems and services developed for people to maintain or improve functioning and thereby promote well-being. AT enables people with all forms of disabilities in functioning to live healthy, productive, independent, and dignified lives, participating in education, the labor market, and social life. They can reduce the need for formal health and support services, short & long-term care, and the burden on carers.

Currently, Sierra Leone, like many other Low- or Middle-Income Countries (LMIC) in the world, has no clearly defined national standards for the provision of AT. Sierra Leone is invariably dependent on imported products as the country has extremely limited capacity to produce AT devices locally. Not-for-profit organizations play a very vital role in the provision of Assistive Technology in Sierra Leone; however, the distribution of AT products and management post-distribution remains a big challenge. This is primarily due to the absence of a centralized system of procurement and distribution of AT devices in the country. The country does not have statistics on the number of products that have been given out thus far by various donors. In the past, donors and other MDAs preferred to run a parallel system of distributing AT products without engaging MoHS. Such a system added to the high attrition of donated AT products and complexities in the management of AT services.

The Assistive Technology (AT) Policy and Strategic Plan 2021-2025 of Sierra Leone guide stakeholders to build on their existing work and to develop the standards, guidelines, and mainstreaming necessary to improve the quality of services available for persons with disabilities by creating a well-functioning ecosystem with the capacity to provide quality and affordable rehabilitation and assistive technology services promptly.

The Assistive Technology Procurement Guidelines are an important step towards fulfilling this directive. This helps in implementing Sierra Leone's obligations under the Convention on the Rights of Persons with Disabilities and ensuring that the Assistive Technology (AT) Policy and Strategic Plan 2021-2025 and Priority Assistive Technology Products List of Sierra Leone are delivered. It also serves as an important tool to negotiate and coordinate donor support for improved quality of AT and AT services for persons with disabilities in Sierra Leone.

The purpose of the Assistive Technology Procurement Guidelines for the Provision of Assistive Technologies in Sierra Leone is to provide a framework for an appropriate AT provision, for persons with disabilities, regardless of their age, location, ethnicity, and socio-economic

background. It is hoped that these Guidelines will help ensure that users receive appropriate and affordable AT that suits their needs, daily activities, and lifestyles while satisfying minimum requirements for safety, strength, and durability.

The Guidelines are developed based on international standards set out by the World Health Organization (WHO) to ensure that stakeholders and providers of AT can offer persons with disabilities in Sierra Leone quality products and services that are informed by research, evidence, and best practice. The Guidelines are also a tool to help users have control and choice about what AT will help them in their daily activities and be active participants in society.

1.2 What is Assistive Technology?

Assistive Technology (AT) is any item, piece of equipment, or product that helps a child or adult carry out tasks they might not otherwise be able to do well or at all.

AT helps to reduce the impact of impairment and increase, maintain, or improve the ability of people with disabilities to do their daily activities and be an active part of the family, community, and civil life. AT is used by girls, boys, women, and men with different forms of disabilities, for different activities, and at different times in their lives. Some AT is used by groups of people (such as audio to text on a television, or a ramp on a public building). Some AT is for personal use. Figure 2 shows some of the different groups of AT for personal use, and examples for each group are given below:

- **Hearing:** Hearing aids, amplified telephones, doorbell indicators, software for the gesture to voice
- **Mobility:** Wheelchairs, tricycles, prosthetic legs, crutches, walking frames, transfer boards
- **Vision:** Spectacles, magnifying glasses, telescopes, white canes, refreshable braille displays, screen readers, talking watches
- **Communication:** Communication boards or cards with letters, symbols, or pictures; adapted writing and drawing equipment; electronic communication devices and tactile marks.
- **Selfcare:** Pill organizers, timers, time management products, item locators, task reminders, shower

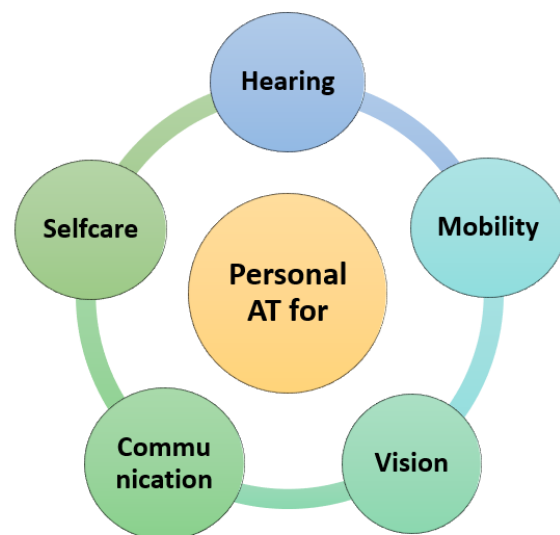


Figure 2: Some categories of Personal AT

chairs, toilet seats, urinary management products,
dressing hooks or sticks

1.3 The Rationale for the guidelines

Currently, Sierra Leone does not have standard procurement guidelines for AT, resulting in partners including donors using different methods of procuring and distributing AT products. In the absence of procurement guidelines, it has been difficult to coordinate how AT products should be procured and distributed in the country. Additionally, the AT products that have been procured were not assessed whether they meet the set standards. These procurement guidelines would help to coordinate and standardize the procurement of AT products in Sierra Leone. This would lead to the procurement of appropriate and good quality AT devices that would meet the needs of the users.

1.4 The scope of these guidelines

The Procurement Guidelines are a major step in defining what AT should be most readily available for persons with disabilities in Sierra Leone, and how persons with disabilities can access this AT safely and effectively. The Procurement guidelines aim to help guide Sierra Leone on how to access appropriate and quality assistive products, accessories, spare parts, and related services that are safe to use, at fair prices. Assistive products may be procured from different sources; directly from the manufacturer or its economic operators (supplier, distributor, agent, etc.), and may be locally manufactured or imported. Assistive products may also be acquired through pooled procurement, donations from nongovernmental organizations, or refurbishing used products. They can be procured by the public as well as private organizations, including nongovernmental and user organizations.

The AT Procurement Guidelines do not cover all procurement management cycle aspects. It only describes the core principles and processes used to procure affordable, appropriate, and quality assistive products through competition/ tendering. The aim is to provide an overview of the following:

- ✚ Procurement and supply management
- ✚ Strategic objectives for efficient procurement
- ✚ Core principles for procurement of assistive products
- ✚ The role of the procurement team and other actors involved in the process.
- ✚ The assistive product procurement process based on competition (tendering)
- ✚ Other means of acquiring assistive products.

The AT Procurement Guidelines are deliberately not dogmatic. They offer the Government, persons with disabilities, service providers, and the wider community guidance and tools to assist in improving access to appropriate Assistive Technology at local, provincial, and national levels now and in the future through:

- ✚ Maximum user involvement at every step
- ✚ Policy and guidelines that support and guide effective AT provision.
- ✚ Effective AT services that people can reach.
- ✚ Training for local AT personnel

The Guidelines are aligned with Assistive Technology (AT) Policy and Strategic Plan 2021-2025, the Priority Assistive Technology Products List of Sierra Leone, the Public Procurement Act 2016, the Ministry of Health and Sanitation Procurement Guidelines, and the National Procurement Guidelines of Sierra Leone, and the different levels of service delivery at community, district and national levels. It is the intention that these Guidelines will expand in the future to address AT priorities of all persons with disabilities.

The Guidelines focus on AT that:

- Is used by women, men, girls, and boys of all ages with long-term hearing, mobility, and/or vision impairment (see Figure 3).
- Is likely to have the most impact on the lives of persons with disabilities.
- Can be delivered through existing services now or after some further training and capacity building.
- Is needed by and will reach a large proportion of women, men, girls, and boys.
- Is safe and durable (quality).
- Can be obtained and maintained at an affordable price.

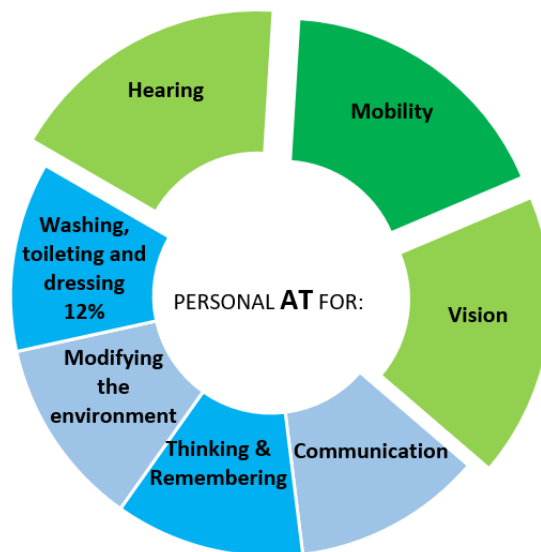


Figure 3: Categories of Personal AT covered on the scope of these guidelines

1.5 Policy Framework and the AT Situation in Sierra Leone

The United Nations Convention on the Rights of Persons with Disabilities (CRPD) ensures there be access to quality assistive products at an affordable cost and as well fosters international cooperation in support of national efforts for the realization of the purpose and objectives of the Convention. The convention makes access to assistive products a fundamental human right and

it is a legal obligation for all signatories to take effective measures to ensure personal activity and participation, with the greatest possible independence, for people with functional limitations. The 1991 constitution of Sierra Leone incorporates the main elements of the United Nations standard rules on equality of opportunities for persons with all forms of disabilities as well as the recently ratified UN Convention on the Rights of Persons with Disabilities (UNCRPD), which was enacted in the Sierra Leone Persons with Disability Act, 2011. These rules and the convention provide an important framework for any policy in Sierra Leone to achieve equalization of opportunities for persons with functional difficulties. In 2021, Sierra Leone developed and launched the Assistive Technology (AT) Policy and Strategic Plan 2021-2025 and the Priority Assistive Technology Products List of Sierra Leone. These policy documents form the basis for implementing Sierra Leone's commitments under UN CRPD and SDG 2030. They also envision a well-functioning health ecosystem that can provide quality rehabilitative services and assistive products at an affordable price and promptly to persons with disabilities.

The primary responsibility of ensuring quality, affordable, and customized rehabilitation and assistive device services lies with the MoHS. Therefore, the policy acknowledges the fact that rehabilitation and assistive technology services should be integrated at all levels of health care delivery i.e., primary, secondary, and tertiary.

The policy guidelines recognize and address the needs and rights of persons with disabilities to deal with diverse tasks and challenges in a dignified manner. The rehabilitation and assistive technology policy and strategic plan aim to provide PwDs with the best possible opportunity for full and effective participation and inclusion in society. They deserve the opportunities to study, work, access services, etc. that are equal to those of other citizens. This will maximize the potential for persons with disabilities to contribute to the development of the nation.

The development of the Assistive Technology (AT) policy is consistent with the Government of Sierra Leone's desire to prioritize disability-inclusive development, as addressed in the nation's Mid-Term National Development Plan (MTNDP, 2019 to 2023). The MTNDP outlined actions to review, improve and develop policies that relate to the provision of ATs required by persons with disabilities. The AT policy also aligns with several national, regional, and international agreements and obligations to which Sierra Leone has signed up. The AT policy goals, objectives, and guiding principles have been derived from the National Health Policies (NHP) including but not limited to CRPD, The Persons with Disability Act, 2011, and the Basic Package of Essential Health Services (BPEHS), WHO Global Disability Action Plan, Universal Health Coverage (UHC), Sustainable Development Goals (SDGs), ASTANA Declaration and AT 2030.

In Sierra Leone, Assistive technology services are scarce, fragmented, and in some instances non-existent, especially from the MoHS. This lack of adequate and quality assistive technology services poses a great challenge for the people living with disability in respect of their ability to contribute to the society and country despite their due willingness. The demand for assistive devices from users is set to rise due to a recent increase in Non-Communicable Diseases (NCDs) and road traffic accident cases. Although the government is committed to ensuring that demands of AT products are met as per provisions enshrined in the CRPD and The Persons with Disability Act, 2011 in Sierra Leone, there has been a lack of strategic guidelines and plans.

The population of Sierra Leone is quite young, 78% fall into the age group of 5 to 50 years with the elder population (above 50) constituting only 9%. As per the Population and Housing Census (PHC) 2015, the prevalence of disability is 1.3% (93,129) of which the northern region has the highest number of persons with disabilities (32,849), which represents 35.3% of all persons with disabilities in the country. Disease or illness is the major cause of disability among the country’s disabled population, accounting for 40.5% of cases of the 93,129 people with disability in the country. This is followed by congenital disability (16.2 %), other non-specified causes (10.5%), accidents (8.8%), and natural aging (8.1%). Other causes of disability, including road traffic accidents, occupational injuries, injuries sustained in the war, and injuries that were not specified accounted for less than 5% of the total number of persons with disabilities. The percentage of persons with disabilities in Sierra Leone has dramatically increased by the long and bloody civil war in 2002, the deadly Ebola Scourge in 2014, the devastating Freetown mudslide in 2016, and COVID-19 in 2019 coupled with a weak health system further added to the challenges of the PwDs.

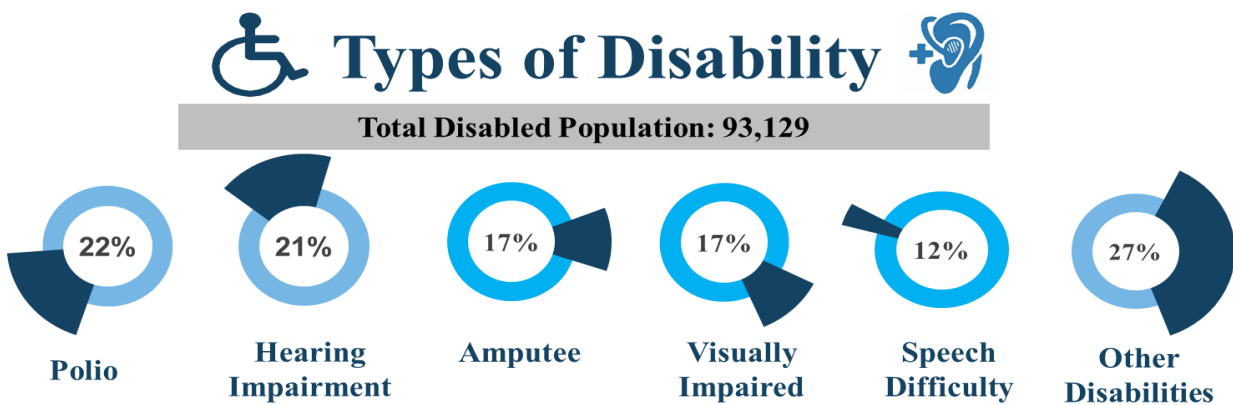


Figure 4: Sierra Leone Disability Profile (Source: PHC 2015)

Sierra Leone is invariably dependent upon imported products as the country has extremely limited capacity to produce AT devices locally. Not-for-profit organizations play a very vital role in the provision of Assistive Technology in Sierra Leone; however, the distribution of AT products

and management post-distribution remains a big challenge. Such a system added to the high attrition of the donated AT products and complexities in the management of AT services, as users were left with no choice but to look to MoHS-supported rehabilitation centers for repair and further management.

The shortage of trained specialists and qualified rehabilitation professionals is one of the key challenges the Assistive Technology sector in the country has been facing for a long time. The country currently has a handful of hearing-aid technicians, physiotherapists, occupational Disability Prevalence therapists, prosthetics and orthotics, wheelchair technicians, and speech therapists. Most of them have been trained out of the country. The country has only one professional institution situated within Tonkolili District College of Health Sciences offering a Diploma and BSc in Physiotherapy Programme.

2. Development of Assistive Technology Procurement Guidelines

2.1 Establishment of a subgroup

As a part of the government's endeavors to improve access to assistive technology products and service delivery in the country, MoHS with support from GDI through FCDO in 2021 launched the country's first-ever "AT Policy and Strategic Plan (2021-2025)" and national "AT Product List of Sierra Leone". These policy documents form the basis for implementing Sierra Leone's commitments under UN CRPD and SDG 2030. Building on this work, and based on the recommendation from the Policy and Strategic Plan which states that there should be an "Establishment of standards and regulatory mechanisms for quality AT products by developing mechanisms that ensure the production, procurement, and provision of quality assistive products while enabling affordable solutions. Based on the recommendation from the 'National Disability, Assistive Technology, and Rehabilitation Technical Work Group' (NDATR TWG) a subgroup titled "Development of the Assistive Technology Procurement Guidelines Subgroup" was established. The subgroup comprised stakeholders, users, and representatives from various organizations working in providing assistive devices to the population. The subgroup was entrusted with the responsibility of leading the development of the AT procurement guidelines and facilitating the integration of the developed AT procurement guidelines into the national procurement guidelines.

2.2 Consultations and validation

A series of consultations were held to agree on the methodology and the drafting process. Some of these consultations were done as part of the subgroup meetings. Figure 5 shows members of

the subgroup during one of the consultative meetings. A literature review of existing AT procurement guidelines from other countries was done, which helped inform the drafting of the AT procurement guidelines. A framework was developed using multiple evaluation criteria to ensure that the guidelines complied with the UN CRPD, aligned with existing national procurement guidelines, national AT policies and Priority Products List, and systems in Sierra Leone, and that decisions were made in the best interests of users in mind. Inputs, suggestions, and feedback from the Subgroup Consultative meetings shaped the content and structure of the Guidelines. A validation workshop was held for the endorsement of the Assistive Technology Procurement Guidelines.



Figure 5: Participants during the consultative meeting

3. What to procure: assistive products, accessories, spare parts, and related services

This guideline is about procuring assistive products, accessories, spare parts, and related services. Accessories are parts that alter the functionality of a product, for example, a special footrest for a wheelchair. Spare parts replace worn-out or broken components, for example, broken casters on a wheelchair. Related services are considered to be an integral part of assistive product procurement as they greatly enhance efficient and effective product provision. Services can include assessment of an individual's needs; product fitting, maintenance, and repair; and follow-up for preventive and corrective purposes. In all circumstances, regular maintenance can prolong the lifetime of assistive products and should be specified in the contract with the supplier preferably, the related services should be carried out by professionals at the primary/local community, and secondary and tertiary level assistive technology (AT) service centers. Sometimes these services must be done by the product supplier. Possible reasons for this are:

- ✚ appropriate competence on a specific assistive product is not otherwise available;

- ✦ the supplier's service center is closer to the user than other service centers;
- ✦ the supplier can provide the user with a more efficient service (e.g., availability of spare parts).

In Sierra Leone, there is a shortage of adequately trained personnel to provide these related services. Therefore, it is critical that interested lay people are involved and educated to an appropriate standard in the provision, fitting, and simple repairs by care providers, such as local healthcare workers and/or rehabilitation staff. This training can also be carried out by the assistive product supplier and consequently, in most cases, it is practical to include relevant services in their contracts. Assistive products, accessories, spare parts, and related services will hereafter be collectively called assistive products (except when accessories, spare parts, or related services are described specifically).

3.1 Procurement at the tertiary, secondary, or primary level

Assistive products can be procured at different administrative levels. It can be done at the tertiary level (national); where procurement will take place centrally and contracts with suppliers are for assistive product deliveries all over the country. At the secondary level (district and regional), the AT centers, rehabilitation institutions, or health facilities are given the authority and budget to procure assistive products and at the primary level (local community) procurement processes are initiated within the local healthcare system.

National procurement has several advantages. It saves resources by avoiding parallel processes, and one procurement team per product category will save time and personnel compared to running corresponding processes at the secondary or primary levels. It can also optimize contract terms i.e., fewer customers for the different suppliers in the country, which increases competition leading to optimized contract terms and conditions. There is a greater volume for lower unit prices; greater volume compared to procurement at the secondary or primary level, which brings down the unit price and equal prices for the whole country: long-term agreements are made with the suppliers, and purchases are based on these contracts. The advantage of procurement at the secondary and/or primary level is that the districts and local communities have greater control over the procurement process and can to a greater extent decide what they need to procure.

4. The procurement management cycle

Procurement and supply management is a systematic activity that ensures the continuous quality and availability of products through optimal procurement planning, storage, and distribution

from the manufacturer to the end user. Procurement is one of several elements of assistive product supply management. Public Procurement in Sierra Leone requires that the following stages make up the Procurement cycle -Planning, Sourcing, Contracting, Contract Management, Storing, Distribution, Disposal, and Evaluation. The product management cycle is illustrated below:

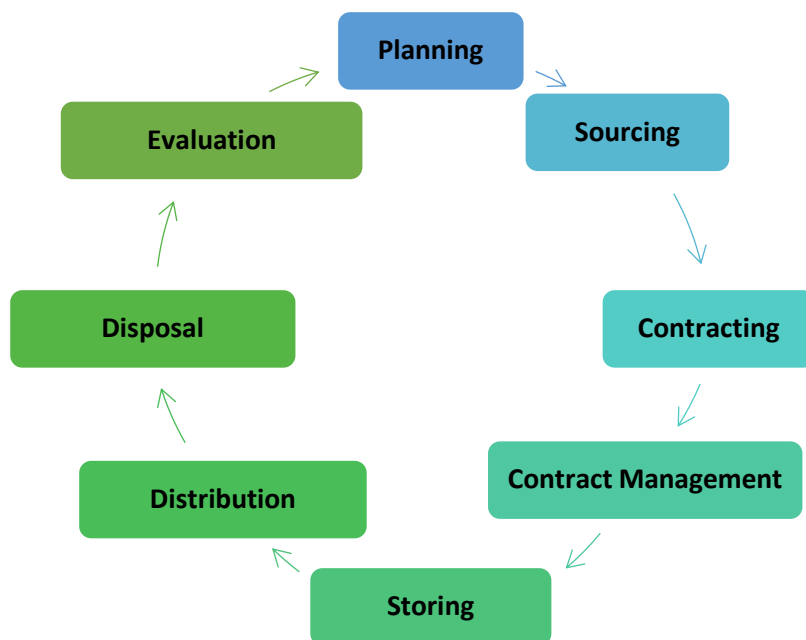


Figure 6: The Product Management Cycle

5. Strategic objectives for efficient procurement

The procurement of assistive products is typically driven by four strategic objectives:

1. obtaining appropriate, high-quality, economical assistive items.
2. choosing dependable suppliers.
3. ensuring on-time deliveries.
4. achieving the lowest total cost of ownership.

No matter what mix of public and private services is employed to administer the supply system, these objectives apply to any assistive product procurement and supply system.

6. Procure appropriate, good quality, affordable assistive products

6.1 Ensuring efficacy

The ability to achieve a desired or anticipated effect is referred to as efficacy. Efficacy, as used in the context of assistive technology, refers to a service's or a product's capacity to enhance users'

engagement and activity. The benchmark by which any increase in activity and engagement obtained in actual practice should be judged as efficacy. When the standard of practice is being evaluated, for instance, effectiveness is not itself subject to monitoring. Instead, it is the result of analysis, the consensus among experts, and the study.

In 2021, the Ministry of Health and Sanitation, with technical support from CHAI and WHO, developed a national assistive products list. This includes 70 priority assistive products that cover the six key areas of functional limitations: mobility, hearing, vision, communication, cognition, and self-care domains. A Series of expert panel consultative meetings took place to identify the most needed products in the country. This gathered together representatives from the Ministry of Health and other key stakeholders including government, donor agencies, nongovernmental organizations, organizations of persons with disabilities, and users of assistive products. An intensive literature review was undertaken to develop a list of assistive products and their classification as per WHO ICF guidelines. A qualification framework was developed using multiple evaluation criteria to evaluate the country's AT product eligibility for priority devices. All the suggested equipment was thoroughly evaluated and reviewed severally before finalization. A validation workshop was held for endorsement of the list by an expert panel and users. As a result of the above deliberations, a consensus was reached by the expert panel on 70 assistive products selected mainly from WHO's assistive products list (APL) which served as a model.

6.2 Ensuring safety, performance, and quality

It is important to ensure that assistive products are safe, perform according to their intended use, and are of good quality. Assistive products should be designed so that the risk of injury or other adverse events related to the use of the product, such as sudden or unexpected failure, is minimized. To achieve this, they must meet the appropriate requirements of national and/or international standards. Standards can help the provider and user to understand important features of a product, which will help to guide their choice (for example, how steep is the slope that a wheelchair can manage and at what point will it become unstable; or the maximum body weight a manual wheelchair is designed to carry). To ensure that assistive products are appropriate to the context in which they are being used, Sierra Leone has developed international standards to develop detailed requirements that relate specifically to their situation. The procurer must take special precautions to ensure the assistive product will work well. For example, hearing aid batteries are prone to rust, particularly in conditions of high humidity that are found in many low- and middle-income countries including Sierra Leone. Batteries intended for use in these environments should be rust-resistant and should be delivered with assistive products by the supplier/manufacturer. The provider or user should

ensure that this also applies to replacement batteries. Hearing aids must operate using a battery type that is easily obtained in the local area. For example, this can include conventional hearing aid batteries, watch batteries (which may be more readily available in some low- and middle-income countries), and rechargeable cells. The batteries should also be appropriate for the local environment. Both issues should be included in the procurement specifications for the tender announcements.

6.3 Select reliable suppliers

Efforts should always be made to find reliable suppliers of good quality products. This can be achieved with active quality assurance programs involving both surveillance of performance and testing of product quality. A system of preselecting suppliers and monitoring product performance will be established. Preselection is usually open to any interested supplier and their assistive products. The purpose of preselection is to ensure that the supplier is a registered company in a public registry and that the assistive products offered are manufactured in compliance with good manufacturing practices. The preselection of suppliers should be undertaken objectively, and therefore selection criteria must be in place before inviting bids/offers from suppliers. Preselection of (suppliers) bidders is to identify/select, before soliciting bids, a limited number of suppliers of assistive products that best meet the criteria to qualify for a procurement. The selection can be based on factors such as experience, financial ability, managerial ability, reputation, work history, etc. Qualified bidders will receive the invitation to bid documents.

6.4 Achieve the optimal total cost

The total cost in procurement means all direct and indirect monetary costs related to the procurement, storage, transportation, customs clearance, insurance, quality assurance, and distribution of an assistive product, any accessories, spare parts, and related services. The procurement procedure should aim to achieve the optimal total cost. In achieving optimal cost in procurement, procurement based on competition (tender) is usually the best guarantee.

7. Core principles of procurement

The Model Law on Public Procurement enacted by the United Nations Commission on International Trade Law promotes “fairness, integrity, transparency, competition, and cost efficiency for the procurement of equipment, including assistive products”. These are principles

supported by WHO as well as the Public Procurement Manual of Sierra Leone 2020 which states that public funds are spent in a transparent, efficient, and fair manner.

7.1 Integrity, fairness, and transparency

A code of conduct or declaration of values is an asset when promoting good practices and high ethical standards in procurement. Integrity, fairness, and transparency are key factors in this context. A procurement process has integrity when all parties are honest, follow an accepted code of ethics, have high moral principles, and are transparent. A fair procurement process is a process where all parties are treated without favoritism or discrimination. For assistive product procurement processes, fairness is essential to attract reliable suppliers and achieve the best prices. Mechanisms to monitor that the procurement process rules are being followed and to enforce them appropriately in accordance with key features of a transparent procurement process. Such mechanisms include audits and investigations, and prosecutions for criminal offenses.

A transparent procurement process occurs when adequate information is provided regarding procurement procedures and contracts. In tenders for assistive products, formal written procedures should be developed and followed throughout the procurement process, from the selection of suppliers, announcement, and awarding of bids, and monitoring of product(s) and supplier(s). Explicit selection criteria should be developed and used to make procurement decisions. Tracing accountability for all decisions is also valuable. Antifraud or anticorruption software should be used, where it is available.

8. The Procurement Process

8.1 Planning

8.1.1 Select an assistive product to be procured

In 2021, MoHS with technical support from Clinton Health Access Initiative (CHAI) and World Health Organization developed a national priority assistive technology products list. Assistive technology products to be procured shall be selected from the national AT products list.

8.1.2 Quantification and forecasting

Using the AT Quantification tool conduct costed annual quantification and forecasting of the selected priority AT Products. The quantification will be done based on the existing data, and sources such as reliable statistics on assistive product purchases over the last two to five years.

In the absence of reliable data household surveys on the assessment of the assistive product, need can be used to collect population data on persons with disability. As part of the quantification and forecasting process, a committee will develop an annual supply plan which details the quantity required to meet the demand, cost, and lead time required to ensure optimal procurement delivery stages.

8.2 Sourcing

8.2.1 Methods of procurement and soliciting bids

In line with the Public Procurement Act of 2016, the following methods of procurement will be considered based on the procurement value:

- ✚ Open competitive bidding
- ✚ National competitive bidding
- ✚ International competitive bidding
- ✚ Restricted bidding
- ✚ Sole source

8.3 Contracting

In line with the Public Procurement Act of 2016, a customized contract that addresses all the relevant issues should be prepared. A model agreement may serve as a starting point for drafting the contract which can then be modified in line with the specific details. The following list is an example of what should be included in a contract:

- ✚ Identification of the parties
- ✚ Order of precedence
- ✚ Product specifications (refer to the national AT Standards document)
- ✚ Place of delivery
- ✚ Duration/term of the contract
- ✚ Delivery time
- ✚ Responsibilities of the supplier
- ✚ Responsibilities of the buyer
- ✚ Contract monitoring and supervision.
- ✚ Reporting requirements
- ✚ Payment terms
- ✚ Payment methods
- ✚ A clause on when and how to adjust prices during the contract period, for example, due to changes in exchange rates on imported products security/safety considerations.

- ✚ Additional insurance requirements
- ✚ Warranties
- ✚ Notice provisions.
- ✚ How to handle breach of contract
- ✚ How to handle disputes
- ✚ Signature of the parties

Preferably, the supplier should have responsibility for the assistive products until they have reached a clearly defined delivery point, e.g., at a specific warehouse. This should be defined in a contract with the supplier. Each item in the above list should be carefully considered and appropriate language included in the contract to ensure protection for both the procurer and the supplier. Failure to address common issues and establish a plan for unforeseen circumstances may lead to lengthy court proceedings and substantial financial loss. In addition to the above, all the elements of the technical requirements should be dealt with in the contract. So should relevant statistics, which ought to be provided by the supplier (for example sales/deliveries per month/quarter/year).

Contracts should include a clause for rejecting or refusing assistive products that do not conform to the specifications set out in the tender announcement. Also, they should state how long spare parts for repairs and maintenance should be available after the termination of the contract (preferably at least five years). Contract duration can vary from a few months to four years depending on the volatility of the market. Entering into long-term contracts when it is expected that prices may decrease could be unwise. Long-term contracts may prohibit the use of new innovative products. On the other hand, organizing tender-based contracts requires considerable resources and therefore it is difficult to repeat the process for each assistive product category each year. A two-year contract with the opportunity to extend the term by one year up to a maximum of four years is generally a good compromise.

8.3.1 Contract Management and implementation

The objective is to make the new contracts and their content known to professionals at the district and local levels who are going to make orders for assistive products as a result. The importance of making purchases in compliance with the contracts should be emphasized. For example, the contract states the terms of delivery and which Incoterm (International Commercial Terms) rule is applicable.

The procurement team leader is responsible for making professionals in the primary, secondary, and tertiary healthcare systems aware of the new contracts and products. In addition to the Internet, information about the new contracts should be presented in videoconference meetings that all team members can access.

The products and relevant information should also be presented on a database established for this purpose. Preferably, this should be part of the Global Assistive Technology Network (Eastin) or an equivalent.

It is important to make sure that the terms of the contract are complied with. To achieve this, the procurement team must establish a plan to follow up on each contract; this should include an evaluation of the deliveries of assistive products (see Monitoring and Evaluation Section) and must be approved by the senior officer from the end user office. Managers at the primary, secondary, and tertiary levels of the healthcare system are responsible for following up on the plan, and the procurement office should make sure that this takes place. Professionals at the secondary and primary levels should comply with all the procurement contracts agreed upon with suppliers. Random checks should be carried out by the audit department (internal/external). Most importantly, the user must be provided with an assistive product that is necessary and appropriate. If for some reason, a user cannot take up a product supplied through the contract and must be provided with something different that is not included in the contract, an application is needed from the provider/user to the assistive technology center stating why. The application must be registered in the information system at the assistive technology center to satisfy random checks/transparency requirements and must be replaced with the appropriate device within the timeframe.

8.4 Storing/warehousing

Timely delivery means that the assistive products were delivered as ordered and arrived at the place specified by the buyer at the expected time. If delivery is delayed past the agreed time, or if the assistive products do not match those ordered (non-compliance), action must be taken against the supplier responsible according to the tendering specifications and the contracts/invoices. On arrival at the warehouse, the assistive products should be checked for possible breakages. Also, the number and type of assistive products received should be checked against those ordered. If any discrepancies are found, the supplier must be notified immediately and it is recommended that the central procurement office takes charge of this. After the checking stage is complete, the assistive products should be registered in the warehouse information system and put in the appropriate location and shelf. The shipping documents should follow the

assistive products from the supplier to the warehouse. The warehouse must have a safe, secured, conducive temperature/atmosphere to house the product supplied.

8.5 Distribution

The procurement and distribution systems must be set up to ensure timely delivery of appropriate quantities to warehouses at the tertiary or secondary levels, and adequate distribution to health facilities. The assistive technology centers should be responsible for transporting the assistive products from their warehouses in fairly large quantities to local health facilities, from where they are distributed to users in the local community. Separate contracts should be made with a transport agency based on a tender. At the primary level, people identified for the task should sign for the assistive products when received. The user should do the same. These data should be entered into the information system, where it should be possible to track the assistive product from the supplier/manufacturer to the end user.

8.6 Disposal

Disposal is a critical element of the stores, equipment, and other assets management of a procuring entity and is the last stage in the procurement cycle. Disposal may be considered as the ‘third life’ of any items acquired by a procuring entity:

- ✚ First: items are procured and accepted;
- ✚ Second: items are utilized by the procuring entity in the discharge of its duties; often referred to as life cycle and
- ✚ Third: items are disposed of

In line with Part VIII of the Public Procurement Act of 2016 and Part XIII of the Regulations, these guidelines are designed to provide the procuring entity with practical information on how to manage the disposal process and select the most appropriate disposal option in an efficient, consistent, and equitable manner. Note that in accordance with Regulation 169, disposal of land, and sales of samples to bidders, textbooks, publications, reports, works of art, medicines, or other items purchased for resale are not subject to the rules of disposal as outlined in the Public Procurement Manual 2022.

Obsolete: any item of stores plant and equipment which is rendered incapable of further effective use by developments in technology, incompatibility with associated items, or where the annual maintenance and breakdown costs can be certified to exceed a specific percentage (refer to the National Assets and Government's Property Commission) of the estimated cost of a new replacement item.

8.6.1 Authority to dispose

In accordance with section 67 of the Public Procurement Act (2016):

- ✚ The head of the procuring entity shall arrange for a periodical survey to be undertaken by the Board of Survey at least once a year of all surpluses, returned, and scrap assets to ascertain whether any item has become obsolete, unserviceable, or surplus to requirement.
- ✚ It is recommended that the survey be undertaken by a team of at least five members comprised of the following:
 - A representative from the National Assets and Government's Property Commission.
 - A representative from the procuring entity's administration//finance department.
 - A representative of the procurement unit shall act as the secretary to the Board.
 - A representative of the end user department/s disposing of the stores or equipment.
 - The storekeeper or stockholder if available.
 - An officer from any public or private institution with technical knowledge of the items to be surveyed shall be invited to act as a technical person to the committee.
- ✚ The reason for any item becoming surplus, obsolete, and unserviceable shall be explained, and recommendations submitted on the mode of disposal.
- ✚ The report of the survey shall be submitted to the head of procuring entity.
- ✚ Upon receipt and approval of the report of the survey by the head of the entity, the items shall be disposed of as approved.
- ✚ All disposals of fixed assets must be recorded in the asset register of the procuring entity and a formal notification of the disposal sent to the National Assets and Government's Property Commission.

Unserviceable: any item of stores, plant, and equipment that cannot be used for the intended purpose in its present condition due to major defects or damage and is beyond economic repair. Classification as beyond economic repair for this purpose shall be determined on the basis that repair costs are certified to cost more than a specific percentage (refer to the National Assets and Government's Property Commission) of the current market price of a new replacement item.

Surplus: any stores item which has not moved for a period in excess of a specific number of years (refer to the National Assets and Government's Property Commission), or any item of plant or equipment which has remained unused for a period in excess of one year, and where no potential use for the item can be envisaged within the entity.

8.6.2 Disposal options

The choice of the most appropriate disposal option will normally be influenced by the nature of the stocks to be disposed of, their location, and market value. The items shall be disposed of as outlined in the Public Procurement Manual of Sierra Leone 2020.

8.7 Monitoring and Evaluation

Monitoring is particularly important in procurement systems to ensure compliance. Products supplied through agreed contracts must be used and therefore all purchases, deliveries, and distributions to users must be monitored. The same applies to repair and maintenance services. A reliable information management system is one of the most important elements in planning and managing procurement processes. Not having such a system, or the capacity to use it properly is a key cause of failure to procure assistive products effectively. A wide range of indicators will be routinely tracked over time using a specific monitoring system. These indicators include:

- ✚ assistive product selection per contracts made with the suppliers;
- ✚ procurement efficiency in terms of pricing and supplier performance;
- ✚ quality control in terms of breakages;
- ✚ distribution and inventory control in terms of loss, and minimum and maximum stock levels (are the set levels contributing to efficiency?). The monitoring and evaluation and audit office should be responsible for analyzing the data. It is important that all agreements made with the various suppliers, with or without a contract, are registered in the information management system, together with all assistive product distributions to users. The system should register all repairs and maintenance carried out to assistive products and track all orders placed, payments made, and volumes purchased compared with estimates.
- ✚ Evaluating the supplier is an integral part of follow-up activities. Relevant performance indicators include the assistive products, accessories, and spare parts delivered in an acceptable condition (number and percentage of consignments received in good/not good condition. Good = no damage/breakage).
- ✚ Are deliveries full and complete (number and percentage of complete/not complete deliveries. Complete = according to the order, nothing is missing)?
- ✚ Are complaints handled appropriately (complaints accepted and dealt with by the supplier in a good way. Good = the reason for the complaint has been fixed)?
- ✚ Are responses to breakdowns dealt with efficiently (number or percentage of repairs executed within a set number of days, for example, seven days)? Data should be collected

continuously throughout the procurement contract and for each consignment. The procuring organization should write regular reports on the above indicators and inform suppliers when there is a need to improve their performance.

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