



ASSISTIVE PRODUCT SPECIFICATION FOR PROCUREMENT

White Canes

Objective:

The objective of this specification is to help organizations in procuring good quality white canes that are durable and which assist the individuals with visual impairments in moving around.

World Health Organization

1. Product description

The purpose of this section is to provide specific key details relevant to the assistive product so that it is easily identifiable.	
Purpose of 1.1	Name of product as per WHO priority APL and/or commonly used names.
1.1 Name of product	White canes
Purpose of 1.2	As per ISO 9999 classification and terminology document (refer https://www.iso.org/standard/60547.html).
1.2 ISO 9999 code	12 39 03 <i>Tactile sticks or white canes</i> Devices for navigation or identification of the surroundings used by a person with a visual impairment
Purpose of 1.3	Describes the product type in clear, simple, easily understood language and the intended use in addressing functional needs.
1.3 Description and intended use	A white cane is a long rod-like device used by blind or visually impaired travelers to give them information about the environment they are traveling through. Using a cane can warn them of obstacles in their path, tell them of stairs they are coming to, warn them that they are coming up to a curb, and tell them of many other things in the environment that they should deal with. The cane will also alert others to identify them as blind and visually impaired thus needful help can be obtained.
Purpose of 1.4	Refers to general characteristics of the assistive product that describes its appearance and components.
1.4 General features	<p>There are two basic types, the straight white cane and the folding white cane.</p> <p>The white cane is made of a long tube of aluminum tubing, fiberglass or carbon fiber with a handle on one end and a tip on the other. The handle may have a wrist loop on the end or a small crook, which can be used to store the white cane when not in use. The body of the white cane is covered with a white/red paint or reflective tape to provide visibility. Some white canes have a few inches of red paint or reflective tape at the tip indicating the user to have both vision and hearing loss.</p> <p>The folding white cane looks similar to a straight white cane except that it is broken up into several sections which are held together by an elastic cord running through the middle of the tubing, which allows it to be held tightly together when unfolded or folded away when not in use.</p>
Purpose of 1.5	Refers to product models that are included in the specific APS.
1.5 Inclusion	<ul style="list-style-type: none"> • Straight white cane with roller tip • Angular white cane with roller tip • Folding white cane with roller tip
Purpose of 1.6	Refers to product models that are excluded in the specific APS.
1.6 Exclusion	<ul style="list-style-type: none"> • Electronic white canes • Wooden white canes • Ultrasonic white canes
Purpose of 1.7	Important, searchable words that relate to the specific assistive product.

1.7 Keywords	White cane, mobility aids, independent mobility, safe mobility, straight cane, folding cane
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2. Product requirements

The purpose of this section is to provide details of all applicable requirements relative to the specific assistive product. A requirement is mandatory and typically describes what a product should be able to do, how it should appear (product and packaging) etc. Only supply and service requirements considered applicable in procurement of white canes.

2.1 Functional requirements

Purpose of 2.1		A functional requirement refers to technical details and other specific functionality that define what a product variation is supposed to accomplish. Per product variation, the requirement should describe the typical user, specific characteristics of the product (in addition to the general features above) as well as the requirements for standard configuration of the product. It is important to focus on performance requirements rather than form factors. It is important to have a clear and specific description of the typical users including e.g. health condition, functional limitation or demographics (range of age, body weight, height, etc). If applicable, specific context of use (e.g. indoor/outdoor, in noisy environment, etc) should be specified in the product variations.		
Item	Product variations	Typical user	Specific characteristics	Requirements for standard configuration
1	Straight white cane	People who are visually impaired, particularly those with severe vision loss and blindness who can ambulate independently and with ease	Straight tubing Roller tip (e.g. nylon)	<p>The cane should be made of aluminum tubing with about 12mm outer diameter to maintain light weight and straight tubing. The tip should be made of durable (e.g. nylon) material and 2-3cm thick. The roller tip should be flexible enough to roll in 360 degrees.</p> <p>Length varies depending on end-user. For:</p> <ul style="list-style-type: none"> • Tall adults: 145 cm • Adults: 140 cm • Children: 70 cm <p>Handgrip: durable (e.g. plastic or rubber) material which has good grip should be used for all types of canes. Handgrip length: 20 cm, diameter: 2.5 cm</p>
2	Angular white cane	Same as above	Straight tubing with handgrip bent 150 degrees Roller tip (e.g. nylon)	Same as above. In addition, the handgrip should be bent at 150 degrees from the main body of the cane.
3	Folding white cane	Same as above	Foldable tubing Roller tip (e.g. nylon)	Same as above. In addition, the cane can have 4 or 5 folds. The length of the cane after connecting the joints should be 140cm for adults.
Purpose of 2.2		Brief and clear description of general product performance requirements and overall qualities (e.g. stability, strength, durability, waterproof, etc).		

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2.2 General design requirements	The white canes should be strong, durable and light weight to prevent fatigue and withstand certain amount of wear and tear during travel, and its parts should be replaceable. The tubing (e.g. aluminum or graphite) should be 13mm or smaller outer diameter for the main body of the white cane. The elastic cord used in folding cane should be of good quality to last long. The handle should have rubber grip, and an elastic to hook the cane when not in use. The tip (e.g. Nylon) should have good durability and conductivity.
Purpose of 2.3	Details of existing or in-progress national or international standards should be provided here, whether freely or commercially available.
2.3 Standards	<p>White canes should comply with and be tested according to relevant national or international standards. Documents that provide detailed reports of tests performed, should also be provided.</p> <p>If white canes do not comply with or are not tested according to relevant national or international standards, an explanation should be provided.</p> <p>All documentation should be in the official language or in English (other languages could be specified too).</p> <p>There are no specific product standards for white canes, however considerations could be taken to the general standards e.g. EN 12182 <i>Assistive products for persons with disability - General requirements and test methods</i></p>
Purpose of 2.4	A certificate of conformity confirms that a product conforms to applicable national and/or international regulations. If a certificate is required for the specific assistive product, this information should be requested, e.g., CE (Europe), COC (Japan), GCC (USA).
2.4 Certificate of conformity	<p>A certificate that the product conform with applicable national or international regulations and standards should be provided (for example, a declaration of conformity with the medical device directive or the medical device regulation of the European Union).</p> <p>If the product does not conform with applicable national or international regulations and standards, the supplier should provide a certificate that the product comply with the requirements in this call for tender and is safe and effective for use by the typical user.</p> <p>The certificate should specify the product, all applied standards, if any, and the name and contact information of the supplier and be provided with the tender. The certificate of conformity is a legal document and should be signed by an authorized person at the supplier.</p> <p>The certificate of conformity should be supplied in the official language or in English (other languages could be specified too).</p>
Purpose of 2.5	Lists the relevant scope of information required to identify the appropriate size and weight of the assistive product in its standard configuration (specific dimensions may be given if appropriate).

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2.5 Size and weight	Information about the height of white canes should be provided. If applicable, dimensions in operating and folded modes should be provided. Minimum and maximum heights with types of handles should be provided for straight canes. Minimum and maximum number of folds and heights of the cane should be provided for folding cane. The length of the cane to be determined by the height of the user. Generally, it should reach the breastbone when held vertically.
Purpose of 2.6	Lists the relevant scope of information that should be provided to service providers (e.g. how to select, assemble, fit, adapt, follow up, maintain, repair, refurbish the assistive product). The desired language(s) in which the technical information should be provided should be stated.
2.6 Technical information (for service providers)	<p>Information on how to fold and unfold the folding cane should be provided. Instructions on how to assess, select, fit, maintain, service, repair should be provided for white canes.</p> <p>The information materials should be available in print or electronic format. A copy could be provided in large print or braille.</p>
Purpose of 2.7	Lists the scope of information, and its format, that should be provided to end-users to show how to safely use the assistive product.
2.7 Instructions for use	<p>The user manual should include information on safe navigation using the white cane with universal standard mobility techniques, how to store, clean, maintain, and repair the white cane.</p> <p>The user manual should be provided in the official language, and if applicable, in English (other languages could be specified too). The user manual may be provided in print or electronic format. A copy in large print or braille should be provided.</p>
Purpose of 2.8	Refers to the various weather and other environmental conditions, e.g., temperatures, humidity, rain, snow, sunshine, that the assistive product should be able to withstand.
2.8 Environment of use	White cane should withstand various weather conditions, including rain, dust, snow, ice and sleet.
Purpose of 2.9	Refers to the duration of the warranty period and the details of the warranty the manufacturer/supplier should provide within the specified period.
2.9 Warranty	<p>Provided normal heedful use, the supplier should, during the warranty period and without extra expenses, repair parts which break on the products delivered. This comprises all spare parts and labour, except for normal wear and tear of the product.</p> <p>The warranty period should be at least 2 years after delivery of the product. The same should apply for spare parts and accessories.</p> <p>The supplier should cover all transport expenses when repairing the white cane. Following a written complaint, the supplier should investigate and see to the reasonable repair or replacement of the product as soon as possible.</p>
Purpose of 2.10	Refers to the expected duration, in years, of the assistive product. Documents describing how this is ensured must be provided.
2.10 Lifespan	Under normal condition of use, the white cane should be designed for at least 2 years of use.
Purpose of 2.11	Lists the scope of information required in packaging and labeling the assistive product. Explains the state of assembly the assistive product should be in when received by the end-user.

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2.11 Packaging, labelling, and state of assembly	The white cane should be delivered fully assembled. All necessary accessories and spare parts should be included in the package. If any special tools are required, it should be included with the delivery. Each white cane should be delivered in an individual package with a label clearly stating the details of the product. The package should withstand handling during transport.
Purpose of 2.12	Refers to additional product requirements, depending on the specific assistive product, e.g., material, corrosion-resistance, adjustability, foldability, etc.
2.12 Other product requirements	Not applicable in this call for tender.

3. Supply and service requirements

From the information provided below, only those supply and service requirements considered applicable may be used in a procurement bid.

The purpose of this section is to describe key supply and service requirements that are needed in order to ensure that the assistive product is received in due time, operational, being maintained/repaired and refurbished.	
Purpose of 3.1	Lists the scope of information to be requested on how the assistive product will be transported to the place of delivery.
3.1 Transportation	Information on how the white cane will be transported and who should pay for the transportation should be provided.
Purpose of 3.2	Specifies the time between placing an order and receiving delivery of the assistive product (e.g. that it should not exceed 30 calendar days).
3.2 Delivery time	<p>Delivery time can vary according to the order size, inventory of the supplier and manufacturing lead time. For international delivery it can be affected by shipment method and the customs clearance procedures. The delivery time should be agreed by the supplier and customer.</p> <p>In general, after the confirmation of order and payment arrangement, the delivery for domestic order should not exceed 30 working days and the delivery for international order should not to exceed 60 working days.</p>
Purpose of 3.3	Refers to the specific details of the various accessories and spare parts available for the assistive product, including pricing and availability.
3.3 Accessories and spare parts	<p>The following spare parts should be provided:</p> <ul style="list-style-type: none"> • The white cane tips • The elastic cords (foldable white cane only) <p>Spare parts should be made available for a period of at least 2 years after the last order of the white cane. The price of the spare parts should be offered per part and not per set or pair.</p>
Purpose of 3.4	Provides information regarding required maintenance services the supplier will provide, including the timeframe and frequency.

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3.4 Maintenance	Information about payment per hour, including definitions of when a job starts and finishes; travel expenses, from – to, fee per km, rules when several repair jobs are done on the same route; hotel bills; who should provide the spare parts; in cases the job is done by a sub-supplier, the invoice should be sent by the supplier with the contract. The prices should be according to the contract. (More information may be requested to be provided.)
Purpose of 3.5	Provides information regarding required repairment services the supplier will provide, including the timeframe and frequency.
3.5 Repair	Information about payment per hour, including definitions of when a job starts and finishes; travel expenses, from – to, fee per km, rules when several repair jobs are done on the same route; hotel bills; who should provide the spare parts; in cases the job is done by a sub-supplier, the invoice should be sent by the supplier with the contract. The prices should be according to the contract. (More information may be requested to be provided.)
Purpose of 3.6	Provides information regarding required refurbishment services the supplier will provide, including the timeframe and frequency.
3.6 Refurbishing	Not applicable in this call for tender.
Purpose of 3.7	Specifies if training service providers is required by suppliers, and the key elements included in the training (e.g. selection, assembly, fit, maintenance and repair of the assistive product). Refers to detailed training contents or materials, if available and applicable.
3.7 Training of service providers	Information about selecting, assembling, adapting, maintaining, and repairing the white canes should be provided to the service provider.
Purpose of 3.8	Specifies if training users is required by suppliers, and the key elements included in the training (e.g. training to users should include fit, use, maintenance and cleaning of the assistive product). Refers to detailed training contents or materials, if available and applicable.
3.8 Training of users	Information about adapting, safely and effectively using, and maintaining the white canes should be provided to the end-user.
Purpose of 3.9	Provides information regarding other supply and service requirements.
3.9 Other supply and service requirements	Not applicable in this call for tender.