



# ASSISTIVE PRODUCT SPECIFICATION FOR PROCUREMENT

## Talking/touching watches

### Objective:

The objective of this specification is to help organizations in procuring good quality talking/touching watches that are durable and which help individuals with visual impairment to tell time.

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	Talking/touching watches	
Purpose of 1.2	As per ISO 9999 classification and terminology document (refer <a href="https://www.iso.org/standard/60547.html">https://www.iso.org/standard/60547.html</a> ).	
1.2 ISO 9999 code	<p>22 27 12 <i>Clocks and timepieces</i></p> <p>Devices for measuring, displaying and speaking the time</p> <p>Included are, e.g. portable and non-portable devices, devices with or without an alarm function.</p>	
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 talking watch is a timekeeping device that cites time verbally using miniature, inexpensive sound chips that state the time through the auditory mode primarily using synthesized natural human voice and sometimes also features an analog face.	
Purpose of 1.4	Refers to general characteristics of the assistive product that describes its appearance and components.	
1.4 General features	<p><b>Talking watches have the following features:</b></p> <ul style="list-style-type: none"> <li>• Plastic/stainless steel body</li> <li>• Analog/ digital face</li> <li>• Quartz/atomic</li> <li>• One button touch</li> <li>• English/multilingual talking watches</li> <li>• Big dial/ LED light for low vision</li> <li>• Talking calendar</li> <li>• 12/24-hour formats</li> <li>• Water resistant</li> <li>• Adjustment for daylight saving and international time zone - automatic/manual</li> <li>• Night light</li> <li>• Battery operated (e.g. one/two lithium batteries) or solar powered (e.g. use of solar panels on the dial) or USB powered</li> </ul>	<p><b>Touching watches have the following features:</b></p> <ul style="list-style-type: none"> <li>• Braille features</li> <li>• Sturdy minute and hour hands for continuous touching</li> <li>• Dial expansion band</li> <li>• Touch features</li> <li>• Quartz</li> <li>• Analog</li> <li>• Big dials</li> <li>• 12-hour formats</li> <li>• Water resistant</li> <li>• Adjustment for daylight saving and international time zone - automatic/manual</li> <li>• Battery operated (e.g. one/two lithium batteries) or solar powered (e.g. use of solar panels on the dial) or USB powered</li> </ul>
Purpose of 1.5	Refers to product models that are included in the specific APS.	
1.5 Inclusion	Talking watches, touching watches, one-button watches, analog/ digital face watches, pendant watches	
Purpose of 1.6	Refers to product models that are excluded in the specific APS.	
1.6 Exclusion	Talking clocks, conventional watches without voice generation and braille features, touch screen watches	

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Purpose of 1.7	Important, searchable words that relate to the specific assistive product.
1.7 Keywords	Time management, low vision, blind, organization, scheduling

## 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 talking/touching watches.

### 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	Atomic watches (talking)	Complete loss of vision in one/both eyes (total blindness)	Uses radio signals from an atomic clock to self-set time accurately	Analog/digital dial tells time in 12/24-hour format, daylight saving accommodation, self-illuminates with a button, hourly alarms possible, date/year announcement, voice chip that reads the time out in a male/female voice clearly and loudly
2	Atomic watches (touching)	Partial/complete loss of vision	Uses radio signals from an atomic clock to self-set time accurately	Sturdy hour and minute hands for frequent touching, self-illuminates with a button, hourly alarms possible, raised tactile markings that help tell time through touch
3	Quartz watches (talking)	Complete loss of vision in one/both eyes	Uses an electronic oscillator controlled by a quartz crystal	Analog/digital dial tells time in 12/24-hour format, self-illuminates with a button, hourly alarms, date/year announcement, voice chip that reads the time out in a male/female voice clearly and loudly
4	Quartz watches (touching)	Partial/complete loss of vision	Uses an electronic oscillator controlled by a quartz crystal	Sturdy hour and minute hands for frequent touching, self-illuminates with a button, hourly alarms possible, raised tactile markings that help tell time through touch
Purpose of 2.2		Brief and clear description of general product performance requirements and overall qualities (e.g. stability, strength, durability, waterproof, etc).		
2.2 General design requirements		Talking watches should have a natural human voice announcing time in either 12/24-hour format in English or other languages with the push of a button. Touching watches should be made of durable materials and should have sturdy hands in the analog face. Both watches should be easy to use.		
Purpose of 2.3		Details of existing or in-progress national or international standards should be provided here, whether freely or commercially available.		

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2.3 Standards	<p>Talking/touching watches should comply with and be tested according to relevant national or international standards. Tests should be carried out by accredited watchmakers.</p> <p>If touching/talking watches do not comply with or are not tested according to relevant national or international standards, an explanation should be provided. Documents that provide detailed reports of tests performed, should also be provided.</p> <p>All documentation should be in the official language or in English (other languages could be specified too). A copy in braille could be provided.</p>
Purpose of 2.4	<p>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).</p>
2.4 Certificate of conformity	<p>A certificate that the product conforms 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 complies 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 provided in the official language or in English (other languages could be specified too). A copy in braille could be provided.</p>
Purpose of 2.5	<p>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).</p>
2.5 Size and weight	<p>Information about the overall width, height, length and weight of talking/touching watches should be provided. The radius of the dial for different types of watches (male, female, child, low vision) should be provided. For touching watches, the height of the tactile dot and numbers should be mentioned. The size and weight of the case should be provided. Package dimensions and weight should also be provided.</p>
Purpose of 2.6	<p>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.</p>
2.6 Technical information	<p>Information on battery type, procedure to change the battery, set the time, alarm, language and gender of the voice announcing time should be provided. Instructions on how to maintain, service, repair and refurbish the talking/touching watches should be provided.</p> <p>The technical information should be provided in the official language or in English (other languages could be specified too). A copy in braille could be provided.</p>
Purpose of 2.7	<p>Lists the scope of information, and its format, that should be provided to end-users to show how to safely use the assistive product.</p>
2.7 Instructions for use	<p>A user manual with instructions for use of the talking/touching watches should be provided by the supplier. It should provide instructions on how to safely and effectively use the product, and how to maintain, battery requirements and changing procedure and clean it. It is intended for the user and/or caregiver.</p>

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	The user manual may be provided in print or electronic format. A copy in braille should be provided. The user manual should be provided in the official language, and if applicable, in English (other languages could be specified too).
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	Talking/touching watches should withstand various weather conditions, including rain, dust, snow, ice and sleet. They should absorb shock as well. They should also withstand ambient temperatures from +40 to -30 degrees Celsius and relative humidity ranging from 15% to 100%.
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 6 months after delivery of the talking/touching watches. The same should apply for spare parts and accessories.</p> <p>The supplier should cover all transport expenses when repairing talking/touching watches. Following a verbal or written complaint, the supplier should repair or replace the product within 30 working days.</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	Given the purpose of use by typical users, talking/touching watches should be designed for a lifetime of at least 2 years. Documents describing how this is ensured should be provided. A copy in braille could also be provided.
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.
2.11 Packaging, labelling, and state of assembly	<p>Each talking/touching watch should be delivered in an individual package with a label clearly stating details of the product. All necessary parts should be included in the package. Provisions should be made to add labels in braille when needed.</p> <p>The package should withstand handling during transport.</p> <p>The talking/touching watches should be delivered with an intact battery. If the battery is provided separate from the watch, then instructions on inserting batteries should be provided and the watch should be easy to open and navigate with the use of commonly available tools. Special instructions to seek professional help should be provided when necessary.</p>
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	<p>In the tender, the supplier should provide the following information about the talking/touching watches:</p> <ul style="list-style-type: none"> <li>• hourly time announcement</li> <li>• calendar announcement (date/month/year)</li> <li>• adjustable strap size</li> <li>• LED light on/off procedures</li> <li>• power saving mode</li> </ul>

### 3. Supply and service requirements

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

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 talking/touching watches will be transported should be provided and who should pay for the transportation.
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	The time between placing an order of up to 200 talking/touching watches and receiving delivery of them should not exceed 30 calendar days.
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 supplier should offer the following accessories:</p> <ul style="list-style-type: none"> <li>• Batteries (lithium 1-2)</li> <li>• Microfiber cleaning cloth</li> <li>• Watch case</li> </ul> <p>All parts that the talking/touching watches consists of, and which may be replaced at some stage, should be offered as spare parts. The supplier should state which variations of talking/touching watches the accessories and spare parts are meant for. When an accessory consists of one part, the same part should not be offered both as an accessory and a spare part, but only as an accessory. When an accessory consists of several parts that can be replaced, all replaceable parts should be offered as spare parts. Spare parts should be made available for a period of at least 2 years after the last order of a talking/touching watch. 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.
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	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.)

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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 fitting, maintaining, and repairing the talking/touching watch 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 using and maintaining the talking/touching watch 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.