



ASSISTIVE PRODUCT SPECIFICATION FOR PROCUREMENT

Communication Board

Objective:

The objective of this specification is to help organizations in procuring good quality communication board that are durable and which assist the individuals with impairment or difficulty in communication.

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	Communication Board
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	22 21 03 Letter and symbol sets and boards Devices for face-to-face communication when speaking is not possible or is difficult.
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	Communication board enables a person to communicate with another person by indicating symbols, words, pictures, or objects represented. It provides communication for people with communication difficulty with any other person. The user looks at, points to, or otherwise selects the items on the communication board to augment (add to) or replace spoken communication. Communication boards can be used by people with speech difficulties and limited physical movements and other communication disabilities (usually excluding hearing and hard of hearing).
Purpose of 1.4	Refers to general characteristics of the assistive product that describes its appearance and components.
1.4 General features	The overall feature is usually a board with a symbolic logo. There is a set of symbols, paintings, icons, real-life pictures, letters, vocabulary or objects that represent the intent of communication. Use durable materials to make boards or use materials such as paper and cards to carry symbolic symbols for communication. The communication board may be equipped with accessories for support or fixation that can be attached to a shelf, wheelchair tray, table or wall. The multi-layer static communication board can record and play the vocabulary corresponding to each icon.
Purpose of 1.5	Refers to product models that are included in the specific APS.
1.5 Inclusion	<ul style="list-style-type: none"> • Eye gaze communication board (for severely restricted limbs, rely on the eye to look at the symbolic icons on the communication board to express communication intentions) • Picture Exchange Communication System (PECS) (or communication card) • Communication book • Communication board (or multi-layer static communication board)
Purpose of 1.6	Refers to product models that are excluded in the specific APS.
1.6 Exclusion	<ul style="list-style-type: none"> • Product designed as a visual infographic or visual schedules that are not designed primarily for communication but are designed for organization and management or marketing. • Therapy aids for speech or language that are printed onto boards for the purposes of training, therapy, intervention and not communication. • Communication software for use on a laptop, computer, or mobile device. • Speech generating devices.
Purpose of 1.7	Important, searchable words that relate to the specific assistive product.

1.7 Keywords	Communication board; multi-layer static communication board; eye gaze communication board, picture exchange communication system (PECS); communication card; communication book; communication symbol
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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 communication boards.

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	Universal communication board (spot goods)	Various types of people with complex communication needs and their communication partners	Communication symbols and usage patterns produced in accordance with common standards or the common needs of certain groups of people.	The ability to record and play the language of the vocabulary corresponding to the icon/symbol, usually a multi-layer static layout, using standards or basis that suits the common needs of many users or types of users.
2	Customized communication board (personalized)	Users who cannot solve their specific communication needs through the universal communication board	Communication symbols and usage patterns reflect the needs of a particular individual or a specific smaller group.	In addition to following the general principles of communication board design, specific communication symbols or usage methods should be set according to the needs of specific users. There is a function of recording and playing the language of the words corresponding to the icon/symbols, usually a multi-layer static layout.
3	Eye gaze communication board	In addition to eye movement changes, there are communication needs that are severely restricted in other parts of the limb.	The most basic communication needs are usually achieved by the choice of a number of symbols or icons.	The board usually has a transparent border with a gap in the middle. The borders are usually only attached with a few communication symbols (to clarify the user's choice).
4	Picture Exchange	(1) those who can speak but are unwilling to	The communication card set can be easily	Usually made by paper card, the conformity or icon is

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	Communication System (PECS)	communicate actively with words; (2) have the desire to communicate actively, but for various reasons (such as cerebral palsy, mental retardation), those with difficult speech or poor speech ability (usually do not include sputum and hard of hearing).	made with paper cards according to specific user needs.	selected and designed according to the user's needs.
5	Communication book	People who need to use multiple thematic communication atlas to express their communication needs	A collection of diagrams that are aggregated from communication pages that embody different communication themes, usually made according to the specific needs of the user and are easy to make.	According to the individual's communication needs, they are produced in different categories and bound into a book. The page size should be suitable for carrying.
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		Board size should be suitable for the intended user and intended use, easy for users to carry. Print clarity and contrast should be clear and easy to read. Print with permanent ink. The selected material for children or adults is safe (even strayed into the mouth). The number of layout symbol icons should be adjustable. The sound needs to be sensitive and has enough volume. Battery life is longer than 10 hours.		
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		Board size: ISO 19027:2016(E)3.1a) Materials of the board (paper or plastic): ISO 19027:2016(E)3.1b) The design of the symbol on the board should be selected in accordance with ISO 19027:2016(E)3.2 The layout of the display item on the board should conform to ISO 19027:2016(E)3.2 Clarity and contrast of print: ISO 19027:2016(E)3.2)		
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).		

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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 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 supplied in English and main local language.</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).
2.5 Size and weight	The height, width and length, and the weight of the communication board should be specified. The color or black and white version of the board should be specified.
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>The following information about the board should be provided:</p> <ul style="list-style-type: none"> • the language and cultural context in which the board was designed and intended for use; the expected lifespan of the board with heedful use should be provided; • how to assemble and adapt the board; • instructions on how to clean and maintain the board; • any available empirical evidence should be provided for any claims made regarding effectiveness or therapeutic benefit of the board; • lifespan of the board. <p>All documentation should be in English for translation to the main local language of the country in which the product is made available.</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>A user manual with instructions for use of the board should be provided on</p> <ul style="list-style-type: none"> • how to safely and effectively use the product; • how much time is expected for users to learn to use the board; • if an assessment or any other resources are required to be able to use the board; • how to maintain, clean, and repair the board. <p>The manual should be intended for the users and for their closest communication partners or caregivers. The manual can be in print or electronic format in English and main local language.</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.

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2.8 Environment of use	The board should be able to be used in wet and dry environments.
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 any specific warranty period pertaining to the product, and without extra expenses, repair parts which break on the products delivered. This comprises all spare parts and labor, except for normal wear and tear of the product.</p> <p>The warranty period should be in keeping with the Consumer Law of the country, after delivery of the Communication Board. The same should apply for spare parts and accessories.</p> <p>The supplier should cover all transport when repairing the Communication Board. Following a written complaint, the supplier should repair or replace the product within the period outlined by the Consumer Law of the country.</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	5 years.
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	Each Communication Board 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. The package should withstand handling during transport. The Communication Board should be delivered fully assembled or assembled to such an extent that the remaining assembly can be carried out with the use of commonly available screw drivers or wrenches. If any special tool is required, it should be included with the delivery.
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	Information should be provided if secondary service agreements are provided through other companies. Suppliers should give public notice of obsolescence of device. A means for the user to provide feedback to the supplier should be provided.

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/repared 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	The Communication Board should be transported safely.
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).

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3.2 Delivery time	Within 30 days between the time of placing order and receiving delivery.
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>All parts that the Communication Board consists of, and which may be replaced at some stage, should be offered as spare parts. The supplier should state which variations of the Communication Board as well as the accessories and spare parts are meant for.</p> <p>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.</p> <p>Spare parts should be made available for a period of at least 5 years after the last order of a Communication Board. 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 maintenance jobs are done on the same route; hotel bills; who should provide the spare parts; in cases where 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.
Purpose of 3.5	Provides information regarding required repairmen 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.
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 refurbishing jobs are done on the same route; hotel bills; 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.
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 workshop on assembling, fitting, maintaining and repair the Communication Board to the personnel of the relevant agency.
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	Not required.
Purpose of 3.9	Provide information regarding other supply and service requirements.
3.9 Other supply and service requirements	None.