

Measuring access to  
assistive technology

# **The rapid Assistive Technology Assessment (rATA)**

Tool for national representative  
survey enumeration:  
a manual

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# Contents

Abbreviations	5
About this manual	5
 Introduction	 7
What is the rATA?	7
Why was the rATA developed?	8
How was the rATA developed?	9
Who is the rATA for?	10
Using the rATA	13
Before deployment	13
A: Preparing for rATA deployment	13
B: Design and sampling	17
C: Structuring rATA data collection teams	18
During deployment	23
A: Data collection: enumerator's guidelines	23
B: Detailed guide to the rATA questionnaire	28
C: Survey management	47
 Annex A – Potential rATA adaptations for unique deployment situations	 49
 Annex B – Considerations in cognitive testing	 50

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## Abbreviations

AT	assistive technology
ATA-C	Assistive Technology Assessment-Capacity
DAISY	digital accessible information system
DPO	disabled people's organization
EA	enumeration area
GATE	Global Cooperation on Assistive Technology
NGO	nongovernmental organization
rATA	rapid Assistive Technology Assessment
SDGs	Sustainable Development Goals
UHC	universal health coverage
UN	United Nations
UNCRPD	UN Convention on the Rights of Persons with Disabilities
WG	Washington Group on Disability Statistics
WGSS	Washington Group Short Set of questions on disability
WHO	World Health Organization

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## About this manual

This manual supports enumerators and survey coordinators in planning and implementing a survey using the World Health Organization's Rapid Assistive Technology Assessment (rATA) survey tool, which is designed to gather information about the met and unmet needs for assistive technology in a given context. The manual also provides useful information for other stakeholders such as survey planners, national decision-makers and statisticians.

It should be read in conjunction with the rATA Global Deployment Plan<sup>1</sup>. It is divided into three main sections: an introduction to the rATA, a section on activities pre-deployment, and a section on activities during deployment.

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1 Placeholder for links to the GDP online.



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# Introduction

Assistive technology (AT) enables better health, well-being, and equitable participation in society. Globally, the need for AT is growing rapidly alongside the rise in noncommunicable diseases (NCDs) and an ageing population.

Some people use AT to help them recover from an injury or period of ill health, or to prevent or delay functional difficulties associated with some diseases or congenital conditions. For other people, AT is an essential and permanent part of their lives, and even a part of their identity (for example, the use of glasses). Almost everybody will need AT at some point during their lives, and many of us may require many different assistive products at the same time.

However, not everyone has access to appropriate AT when required. The World Health Organization (WHO) estimates that only 1 in 10 people globally have access to the AT they need.<sup>2</sup> Addressing the large and growing unmet need for AT is central to achieving universal health coverage (UHC), meeting obligations under the UN Convention on the Rights of Persons with Disabilities (UNCRPD), and in ensuring no one is left behind in achieving the Sustainable Development Goals (SDGs).

## What is the rATA?

WHO established the Global Cooperation on Assistive Technology (GATE) initiative in 2014 to improve global access to high-quality and affordable AT. To better understand access to AT, the GATE team developed the rATA as a survey tool to be used by countries to identify need and unmet need for AT, barriers to accessing AT, and user satisfaction with AT.

The rATA is an interviewer-administered, population-based survey tool, divided into seven sections designed to gather basic information on factors such as demographics; needs; demand and supply; user satisfaction; and recommendations (optional).

While the Global Deployment Plan provides additional and specific guidance on implementing rATA in a national representative survey, the rATA can also be used with specific populations; incorporated into other surveys; and administered in a variety of ways. (Information on adaptations for unique rATA implementations are provided in Annex A.)

The rATA tool can be accessed on WHO Assistive Technology homepage<sup>3</sup>. For a detailed description of each question, and key enumerator considerations and guidance, see “Detailed guide to the rATA questionnaire” in the “During deployment” section of this manual. A set of training resources including slide-

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2 World Health Organization. Assistive technology factsheet. 2018 (<https://www.who.int/en/news-room/factsheets/detail/assistive-technology>, accessed 12 April 2019).

3 Placeholder for links to the rATA tool online.



decks, quizzes, links and facilitated activities will be provided to further support rATA training and implementation.

## Why was the rATA developed?

Despite the importance of AT, surveys about health or disability rarely include questions about AT to inform decision-making. The rATA aims to address that gap by providing a simple tool to determine answers to the most basic – yet important – AT questions.

The rATA is designed as a stand-alone tool for efficiently and rapidly assessing the need, use, supply and impact of AT in a population. Where required, the rATA can be incorporated in other surveys to allow further in-depth analyses or disaggregation of data concerning AT use by a broader set of characteristics. In this way, findings on AT can be linked to a wider dataset to provide deeper understandings on associations between AT and other issues.

The rATA was developed as part of a WHO Assistive Technology Assessment (ATA) toolkit<sup>4</sup> to make a comprehensive assessment of the situation for AT provision in different contexts. Data gathered through the rATA can:

- inform new strategies to improve access to AT;
- reveal to governments and civil society the unmet needs for AT;
- provide data to help plan or prioritize and plan AT provision;
- help design and deliver interventions to improve access to AT;
- help evaluate the effectiveness of efforts to strengthen access to AT, or to measure progress towards AT targets.

The rATA can also be used alongside other analyses of AT services. In particular, WHO recommends the ATA-Capacity tool, which helps stakeholders understand preparedness to respond to unmet needs for AT. The rATA can also be used to help understand how the main variables (AT need, use, supply, satisfaction etc) vary by:

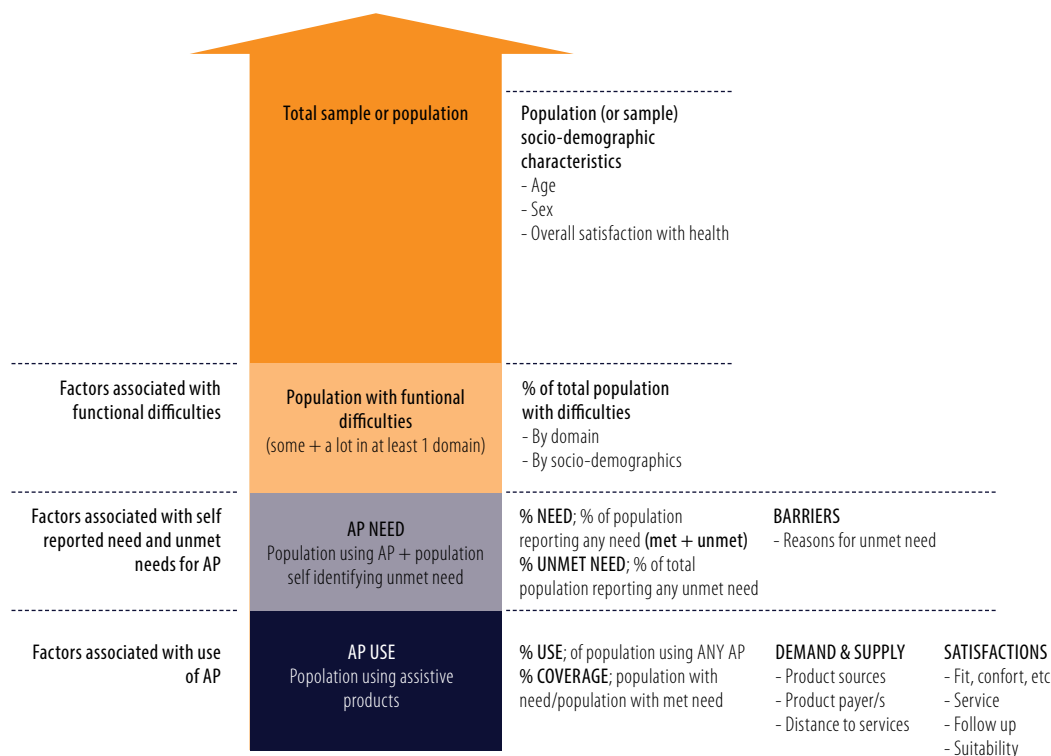
- type and level of functional difficulty;
- age, sex and other basic sociodemographic characteristics;
- location.

While the rATA is intended to provide robust evidence about these main variables, many users of the tool may require more complex analyses, inclu-

4 The WHO Assistive Technology Assessment (ATA) toolkit consists of three data collection tools to measure 1) the met and unmet population need in terms of access to assistive technology (rATA); 2) the country capacity to meet the identified unmet need (ATA-C); and 3) the impact of assistive technology on the people who use it (ATA-I).

ding multivariate analyses and statistical modelling (see Figure 1 for more on the variables that rATA can address).

**Figure 1. Overview of the main variables addressed by the rATA**



## How was the rATA developed?

The rATA was initially drafted using existing health surveys and a literature review to determine the questions. The draft rATA was distributed to WHO regional and country offices, including Tajikistan, Pakistan and EMRO; relevant WHO working groups (including the WHO Sensory Function, Disability and Rehabilitation working group); and external AT experts for review. After feedback from WHO offices and external experts, the rATA was refined further, before piloting and trial implementation. While it is possible to use the rATA in a range of formats, the rATA was planned, designed and tested to be deployed using digital survey apps.

After a small field-test and revision in Pakistan, the first large-scale pilot was conducted in Pakistan in early 2019. The aim was to provide information about AT in Pakistan, but also to provide further feedback on the

survey including technical and operational aspects. Further cognitive testing and translation were then conducted, before finalization at the end of 2019.

It is expected that as more people use the rATA in different contexts, there will be more information on which to draw to strengthen and refine the rATA. WHO will update the tool as necessary.

## Who is the rATA for?

While the rATA can be used by a wide range of stakeholders, the tool was designed with the following users in mind:

- Any organization concerned about advocacy on AT, such as disabled people's organizations (DPOs), nongovernmental organizations (NGOs) and other user groups.
- National or international organizations concerned with the development of evidence-based policies and planning for AT.
- Government or civil society actors who are planning to implement or work on AT provision.
- Other stakeholders interested in how AT can support education, work, family and community life.

Those using the rATA tool should have the following expertise

- Understanding of AT practice in context
  - Health and functioning in individuals and populations
  - AT services
  - AT stakeholders and key issues
  - Assistive product types
- Survey methods
  - Survey conduct
  - Stakeholder and community engagement
  - Ethics and relevant administrative permissions
  - Sampling (unless rATA performed on a total population or subpopulation)
  - Data management
  - Data analysis
  - Data interpretation
- Understanding implications
  - Using data to inform further discussions
  - Using evidence to inform policy and practice changes
  - Sharing new information with key stakeholders

Table 1 sets out an overview of the rATA and the purpose of the information it can gather.

**Table 1: Overview and purpose of information gathered by the rATA**

Section	Domain	Purpose	Outline of questions	Measure
A	<b>Preliminary information / administrative survey data</b>	Administrative information for household  Survey verification, data integrity etc	<ul style="list-style-type: none"> <li>– Survey information: enumerator details, date, time, etc</li> <li>– Other survey-specific information</li> <li>– GPS information (location)</li> </ul>	
B	<b>Demographic information</b>	Individual administrative information  Sociodemographic information	<ul style="list-style-type: none"> <li>– Verification of consent</li> <li>– Individual survey ID for each respondent</li> <li>– Sex/gender of respondent</li> <li>– Age of respondent</li> </ul>	
C	<p><b>Need, unmet need, and functioning</b></p> <p><i>What proportion of the population needs AT?</i></p> <p><i>What proportion of the population cannot access the AT they need?</i></p> <p><i>What is the proportion of the population using AT?</i></p>	<p>Information about the prevalence of functional limitations in a population</p> <p>Determines functional difficulties experienced by respondents</p> <p>Used to understand domains of functional difficulty and provides a basic level of difficulty to guide subsequent questions</p> <p>Can guide estimates of prevalence of functional difficulties and disability</p> <p>Provides information about the unmet need for AT overall and for specific products</p> <p>Provides information about barriers that can impede AT access</p> <p>Provides information about the current use of AT overall and for specific products</p>	<p>Questions C1–C6 collect information on individual functioning. This section is based on the Washington Group Short Set of Questions on disability (WG-SS)<sup>6</sup> with minor modifications to account for the focus on AT in the rATA.<sup>6</sup></p>	<ul style="list-style-type: none"> <li>– Numerator: Persons currently using or identifying any unmet need for AT</li> <li>– Denominator: Total population</li> <li>– Alternate denominator: Population with any functional difficulty</li> </ul> <ul style="list-style-type: none"> <li>– Numerator: Persons identifying any unmet need for AT (whether currently using or not)</li> <li>– Denominator: Total population</li> <li>– Alternate denominator: Population with any functional difficulty</li> </ul> <ul style="list-style-type: none"> <li>– Numerator: Persons currently using AT</li> <li>– Denominator: Total population</li> <li>– Alternate denominator: Population with any functional difficulty</li> </ul>

5 For further information see: <http://www.washingtongroup-disability.com/>.

6 The WH-S is an internationally recognized disability question set comprising six questions on respondents' difficulties in conducting everyday activities such as walking and self-care.

D	<b>Demand and supply</b>	<p><i>Who are the main suppliers and funders of AT?</i></p> <p>rATA can provide information about the supply and funding mechanisms in use for AT provision</p> <p>rATA can help understand current access and unmet needs, and basic determinants of met and unmet needs (many of these questions will only apply to a small number of participants)</p>	<ul style="list-style-type: none"> <li>Questions D1-D2 explore:</li> <li>current use of AT (question D2 is a list of 50 priority assistive products, plus "other" option)</li> <li>D3 identifies any other products used not on the core list</li> <li>D4 is used to calculate the number of assistive products used</li> <li>D5 nominates 3 important products if &gt;3 are used</li> <li>D6 is about sources of products</li> <li>D7 asks who pays for products</li> <li>D8 is about distance to facilities</li> <li>D9 asks about unmet needs</li> <li>D10 determines reasons for unmet needs</li> </ul>	<ul style="list-style-type: none"> <li>Frequency/proportion of each supply source</li> </ul>
E	<b>Satisfaction</b>	<p><i>Is the population satisfied with products and services?</i></p> <p>Provides information about the user satisfaction with the quality and appropriateness of AT services and products</p>	<ul style="list-style-type: none"> <li>Questions E1-E6 explore satisfaction with:</li> <li>current products</li> <li>service quality</li> <li>follow up</li> <li>suitability of products</li> <li>effectiveness of products</li> <li>overall satisfaction with health and well-being</li> </ul>	<p>Proportion of satisfaction with products in use</p> <p>Proportion of satisfaction with provision</p>
F <sup>7</sup>	<b>Recommendations</b>	Solicits respondent expertise and feedback about priority measures to improve AT services, quality and access	<ul style="list-style-type: none"> <li>Open-ended comments about improving access to assistive technology</li> </ul>	
G	<b>Surveyor's comments &amp; post-survey administration</b>	Highlights issues with survey coordinators that require follow up or attention	<ul style="list-style-type: none"> <li>Questions G1-G3 record information about the interview:</li> <li>whether the interview was conducted by proxy or not</li> <li>highlight a need to check, verify information</li> <li>highlight any issues for follow up with the respondent</li> </ul>	

7 The recommendation section requires a text-based entry. It is optional. National Data Coordinators will determine with their country stakeholders whether this question should be asked. Enumerators will be trained to ask the question or skip it according to local advice.

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# Using the rATA

## Before deployment

Who should read this section:

- Stakeholders responsible for planning and implementing a rATA should read this section to understand the key planning considerations before a rATA.
- Personnel responsible for the key steps such as translation, cognitive testing and adaptation should read the relevant sections to understand technical requirements at each step.

### A: Preparing for rATA deployment

#### 1. Translating the rATA

Before use, the rATA may need to be translated into the language(s) used by the survey's target population. Translation of the rATA:

- ensures all questions are asked consistently, allowing for comparison across language groups;<sup>8</sup>
- ensures the meaning of the survey questions is conveyed properly, especially technical or "culturally loaded" terms that may not have a direct word-for-word equivalent;
- ensures questions are appropriate for the cultural context of the survey (combined with pre-testing and cognitive testing);
- ensures common understandings between data collectors across and within countries.

If the rATA is being translated, there are three recommended steps, but national collaborators (Statistical Offices, Ministry partners and others) may have well-established protocols for translating questionnaires. The recommended steps are as follows:

#### Step 1: Preliminary translation

- The WHO-approved UN-Language versions of the rATA are translated into target language.
- The translator should use common sense, known local translations of technical terms, other surveys (especially as used by national statistical

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<sup>8</sup> The comprehensive enumerator guide to each rATA question in the "Detailed guide to the rATA questionnaire" in the "During deployment" section of this manual provides detailed information about how the questions should be asked, and whether enumerators can give prompts.

agencies), and discussions with technical experts to prepare the preliminary translation.

- Some assistive products to have common colloquial names. People with AT knowledge and persons with disabilities should be consulted. Some products might need to use short phrases rather than one or two words.
- Careful consideration is needed to avoid potentially pejorative or harmful words, even if they are still commonly used. The survey is an opportunity to introduce alternative words where there is still problematic language used in the local community.

## Step 2: Back-translation

- The target language version is then translated back into English by a second translator (see below) who was not involved in step 1.
- The second translator should flag any difficult or unclear words and grammar.

## Step 3: Comparison

- The WHO English-language version and the back-translated English version are then compared for accuracy.
- Differences might reflect translation errors, which should be addressed. Other differences might arise from the interpretation of questions by the translator. Some translations might be clearer in the second language without a literal translation. Comparison should consider whether meaning or purpose of the question has changed.
- Minor inconsistencies may be corrected by the two translators prior to testing, or the process may need repeating.

## Who should do the translations?

Ideally, both translators should be fluent in both languages and familiar with related technical terms and concepts relating to the rATA. At a minimum, the translators must be fully briefed in the use of the rATA and its purpose and should have the following language competencies set out in Table 2.

During its development, the rATA has been tested (including cognitive testing), piloted and refined. Many questions are based on existing, well-validated questions and question sets that have existing translations that may be helpful for local translations.

**Table 2: Requirements for survey translators**

Translator 1	Translator 2
Translation from English to target language	Back-translation from target language to English
<ul style="list-style-type: none"><li>– Advanced knowledge of English (and/or other UN languages on which the translation is based)</li><li>– Fluency in target language</li></ul>	<ul style="list-style-type: none"><li>– Advanced knowledge of target language</li><li>– Fluency in English</li></ul>

Following agreement on consistency between the two English versions, the target language version will need to be tested (the testing process is outlined below). In many countries, there may be several local languages or dialects. It is unlikely that the rATA can be translated properly into additional languages. Enumerators should be instructed about how to proceed if they encounter someone who does not use the survey language.

## 2. Cognitive testing

If you are using the rATA *with adaptations*, it may be necessary to test how people in your context understand the questions. There is abundant information about cognitive testing available from many sources. This manual provides a summary of considerations for cognitive testing in Annex B.

## 3. Stakeholder engagement

The first main step towards local rATA implementation is engaging with key actors including the ministry of health, and WHO country and regional offices and any individual, group, organization or unit that may be directly, or indirectly, impacted by conducting the survey and any recommendations or actions resulting from the survey (see Table 3 for an outline of potential stakeholders and their roles).

When preparing to deploy the rATA, the main aims of engaging with stakeholders are to:

- learn from the community to ensure the rATA is as contextually appropriate as possible;
- ensure openness with the interested community about the survey;
- build interest in the rATA results and how they might be used to improve access to AT, and ensure findings are disseminated widely and are as useful as possible;
- access expertise for survey activities like adaptation of the survey and interpretation of findings.

National Data Coordinators and their collaborators are responsible for stakeholder consultations, but all team members should understand the roles of the major stakeholder groups. Enumerators and surveyors should



recognise they are representing the survey and all the people working on it when the visit communities and talk about the survey.

## Stakeholder consultations

Depending on time and resources, there are many ways to engage stakeholders. Some examples include specific stakeholder workshops with multiple groups whether by invitation or open, and individual workshops or meetings with different groups of stakeholders. Sometimes, one-on-one meetings might be necessary.

**Table 3: Potential rATA stakeholders and roles**

Stakeholder	Potential role
Ministry of Health (MoH)	<ul style="list-style-type: none"> <li>– Leading role for successful rATA implementation</li> <li>– Appoints National Data Coordinator</li> <li>– Liaises with all other parties including WHO and engages in launch meetings and planning meetings as required</li> </ul>
MoH “anchor” or focal point	<ul style="list-style-type: none"> <li>– Secures high-level support</li> <li>– See rATA Global Deployment Plan for further information</li> </ul>
Local research group/agency	<ul style="list-style-type: none"> <li>– Implements rATA locally under guidance/instruction from MoH following standard contractual arrangements used in local context</li> <li>– Appoints and supervises enumeration teams</li> </ul>
People who use or might benefit from AT, including people with disabilities, older people, people with health conditions, and others. If available, AT consumer or user groups	<ul style="list-style-type: none"> <li>– May have important preliminary information to inform survey design</li> <li>– Expertise for translation</li> <li>– Act as survey enumerators or coordinators</li> <li>– Trainers or guest speakers for enumerator training</li> <li>– Support for interpreting findings</li> </ul>
Disabled persons organizations (DPOs)	<ul style="list-style-type: none"> <li>– As above</li> </ul>
Research bodies and research ethics oversight agencies.	<ul style="list-style-type: none"> <li>– Provide technical support</li> <li>– Provide existing datasets to inform sampling, weighting, etc</li> <li>– Provide locally translated surveys to help with rATA translation</li> </ul>
Known AT service providers (governmental, non-governmental, private) at different administrative levels. For example, district, provincial, tertiary hospitals	<ul style="list-style-type: none"> <li>– Obtain relevant administrative permissions and approval for the survey</li> <li>– Provide expertise about likely sources of AT</li> <li>– Participate in interpretation of findings</li> </ul>
Provincial and/or national health, social service and education providers	<ul style="list-style-type: none"> <li>– Provide information about AT practice in other sectors</li> <li>– A potential source of survey expertise, enumerators, and experts interested in survey results</li> </ul>
National statistical offices and/or databanks	<ul style="list-style-type: none"> <li>– Provide expertise to support aspects of the survey</li> <li>– Provide existing datasets to inform sampling, weighting, etc</li> <li>– Provide examples of similar questions to support translation and adaptation</li> <li>– Provide detailed maps to support survey planning and implementation</li> </ul>

Parliamentarians and other government officials who may have budget oversight and decision-making authority at local and national levels.	<ul style="list-style-type: none"> <li>– Courtesy information about the survey implementation</li> <li>– Source relevant approvals if relevant</li> <li>– Can often endorse or otherwise welcome a survey (including ceremonial roles)</li> <li>– Can be provided with summary information, policy guidance and other information arising from the rATA</li> </ul>
Private sector service providers, including health, AT providers, aged care providers, rehabilitation services, prescribing health care providers, disability services	<ul style="list-style-type: none"> <li>– Information about sources of AT</li> <li>– Information about AT practice and knowledge among key service providers</li> <li>– Information about appropriate local translations for key products and other concepts</li> </ul>
Nongovernmental organizations (NGOs)	<ul style="list-style-type: none"> <li>– Information about sources of AT</li> <li>– Information about AT practice and knowledge among key service providers</li> </ul>
Civil society representatives, including community leaders and those representing women's groups and older people	<ul style="list-style-type: none"> <li>– A source of knowledge and expertise about important intersectionalities with AT</li> </ul>
People or groups responsible for manufacture and/or import, supply and distribution of products	<ul style="list-style-type: none"> <li>– Provide additional information about the source and nature of products, and their provision</li> </ul>
All stakeholders	<ul style="list-style-type: none"> <li>– Openly share the aims and details of the survey</li> <li>– Involvement in dissemination and responding to findings</li> </ul>

## B: Design and sampling

### 1. Survey sampling

Sampling for rATA implementation in preparation for the *Global Report on Assistive Technology* is described in the Global Deployment Plan and is not covered in depth here. This section outlines some of the main points to consider when training enumerators.

**Supervisors** need to understand how sampling is conducted and ensure the sampling is reflected in their national deployment plan. Supervisors will need to instruct and guide enumerators about the steps they will need to take to implement the sampling.

**Enumerators** will not be expected understand the overall survey sampling in any depth. However, training and facilitated practice will help apply their knowledge and skills, including to map local areas if necessary, and randomly sampling households. This will ensure the right number of households and individuals are approached.

### 2. Allocating clusters

In each enumeration area, supervisors will need a map of all households (usually provided by the National statistics Office). The team will move around in the EA to verify the number of households, eventually make corrections in the map if needed. If there is no map available, then the team

draws a simple map of the area and places all households and some helpful landmarks.

The households are then given numbers on the map. A sample of 10 households per enumeration area is drawn randomly using either a random number generator (using a smartphone) or by drawing numbered pieces of paper from a box.

## C: Structuring rATA data collection teams

### Survey team structure and roles of survey team members

#### Survey team structure

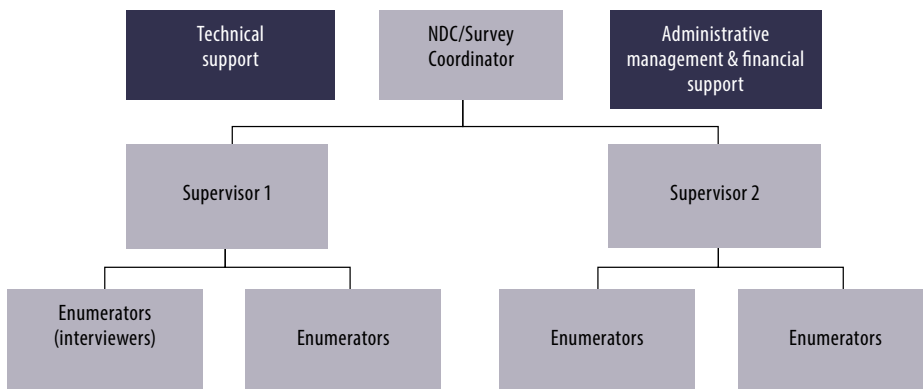
Figure 2 illustrates an example team structure for a rATA survey. Depending on the survey scope, teams can be divided into smaller groups. A survey coordinator has the highest responsibility and oversees the whole survey. A survey may have a leader or leadership team that supervises the survey, and might be accountable to others, such as a WHO country or regional office, government ministry, donor, NGO or others.

Surveys are usually conducted over a large geographical area during a specified and limited time, so it can be helpful to have several small teams to collect data in different areas, like a province, district or even a village. The small teams should have a supervisor or team leader who has responsibility ensuring sampling procedures are followed and is a focal point between teams and the survey coordinators. For large-scale surveys, additional layers of survey management would be responsible for team conduct.

There is no “golden rule” to guide team formation, but the rATA is relatively short and simple, so (as a general guide) one supervisor should be able to supervise up to eight enumerators.

Team size must be flexible and be able to fit with practicalities such as travel (how many people can fit in a car?), or accommodation (is there enough accommodation for larger teams?). It is best to minimize the number of survey team members visible in a community as team of outsiders can create curiosity and raise expectations, which could potentially influence how people answer the rATA questions.

**Figure 2: Survey team structure**



## Team member roles and responsibilities

Table 4 outlines the main roles and responsibilities of the survey team members. This structure and list of responsibilities can be adapted according to the local situation.

**Table 4: Suggested rATA team member roles and responsibilities**

Team member	Illustrative roles and responsibilities
<b>National Data Coordinator</b>	<p><b>Before the survey commences</b></p> <ul style="list-style-type: none"> <li>– Facilitating and leading dialogue with stakeholders</li> <li>– Ensuring adaptations to local context are made</li> <li>– Ensuring local expert advice is obtained and used to plan, adapt and implement the survey</li> <li>– Human resources: source, appoint, manage and hold accountability for the survey team members</li> <li>– Participate in WHO/GATE “Master” training workshops for NDCs (as survey coordinators)</li> <li>– Responsibility for planning and implementation of appropriate enumerator training</li> <li>– Survey budget: define and manage finances associated with survey teams and their costs</li> <li>– Approvals: Identify and prepare applications for all relevant approvals</li> <li>– Determine and document precise responsibilities of team members in job descriptions and codes of conduct as appropriate</li> </ul> <p><b>Survey management, including:</b></p> <ul style="list-style-type: none"> <li>– Manage human resources</li> <li>– Manage survey budget and timeline</li> <li>– Communicate with local authorities and community contacts in advance</li> <li>– Prepare information about survey sites and respondents</li> <li>– Assist survey team and address any needs and questions</li> <li>– Logistics issues: plan for and manage the survey logistics from initial planning meetings, contracting, venues, transport, accommodation and others</li> <li>– Monitor, accompany and/or participate in data collection</li> <li>– Discuss and seek advice from technical advisory team and/or programme management team to address non-technical/technical risks if required</li> <li>– Timeline: with other relevant people, define and manage survey rollout, flag issues, mitigate and manage delays; report to donor, client or other relevant authority</li> <li>– Provide briefs, guidance, feedback and assistance to survey managers and the survey team in general</li> <li>– Record and update technical advisory and leadership team on progress</li> </ul>

<b>Survey supervisor</b>	<p><b>Before the survey</b></p> <ul style="list-style-type: none"> <li>– Assist NDC in logistics of the survey including planning, training, and all other aspects as required</li> <li>– Prepare information about survey sites and respondents</li> <li>– Communicate with local authorities and assistants</li> <li>– Participate in WHO/GATE “Master” training</li> <li>– Support correct implementation of survey method</li> <li>– Lead random sampling of households in the field and monitor that the correct sampled households are interviewed</li> </ul> <p><b>Support survey teams</b></p> <ul style="list-style-type: none"> <li>– Assist and address enumerators’ needs or questions</li> <li>– Support the survey team by conducting interviews as required</li> <li>– Quality assurance</li> <li>– If the survey is implemented on paper, check completed forms for quality assurance and back-up</li> <li>– For digital surveys, examine the data for integrity and follow up with enumerators and team leaders if any doubts</li> <li>– Spot-check some interviews randomly or intentionally for quality assurance</li> <li>– Provide feedback to enumerators</li> </ul> <p><b>Reporting and accountability</b></p> <ul style="list-style-type: none"> <li>– Provide feedback and progress update to NDC/Survey Coordinator</li> <li>– Monitor to ensure survey teams are approaching the correct households</li> <li>– Monitor the use of administrative data sheets for thoroughness and accuracy</li> </ul>
<b>Enumerator</b>	<p><b>Before surveying commences</b></p> <ul style="list-style-type: none"> <li>– Participate in the training and induction processes</li> </ul> <p><b>At the time of the rATA deployment</b></p> <ul style="list-style-type: none"> <li>– Identify respondents assigned by Survey Manager/Supervisor and approach them</li> <li>– Introduce yourself and the survey to your respondent and get consent</li> <li>– Conduct the interview</li> <li>– Manage respondent records and report to your Survey Manager/Supervisor</li> <li>– Report any risks and difficulties to your Survey Manager/Supervisor</li> <li>– Share experience with survey team, and respond to questions of your Survey Manager/Supervisor</li> </ul>
<b>All team members</b>	<p><b>Professionalism</b></p> <ul style="list-style-type: none"> <li>– Working with integrity, honesty and respect as a member of a team</li> </ul> <p><b>Image</b></p> <ul style="list-style-type: none"> <li>– Behaving appropriately as a representative of the implementing organization, including dress code</li> </ul> <p><b>Conduct</b></p> <ul style="list-style-type: none"> <li>– Demonstrate compliance with relevant codes of conduct, especially child protection requirements and other codes relevant to the implementing agency</li> </ul>

## 2. Including people with disability as survey team members

Even though people with disability are not the only group that needs or uses AT, and not everyone with a disability knows about AT, **it is important and helpful to include people with disabilities in rATA survey planning and implementation.**

Doing so should not be difficult, but survey planning often excludes persons with disability. It is often assumed that it is not necessary or useful, or that it is too difficult, to include people with disabilities in survey teams in order to avoid the team making assumptions about what people with disability can and cannot do.

A very important principle for the rATA survey is that we are interested in AT use for everyone, not just people with disabilities. It might be important *not to emphasise* disability for that reason. However, all surveys, especially those that concern people with disabilities, should embody inclusive and non-discriminatory practices and recognize that people with disability have unique expertise in the rATA content. Employing people with disabilities in survey teams also recognizes that the rATA *process* is valuable – and not just the results it provides. That is, conducting a rATA can raise awareness about AT, bring new and existing stakeholders together.

### **Reasonable accommodations**

Usually, a rATA advisory team should include disability experts, who can provide a more detailed inclusion plan for a rATA, recognizing local employment laws and good practice.

## During deployment

Who should read this section:

- All stakeholders interested in the rATA, including AT providers and decision-makers, survey planners, statisticians, and enumerators.

### A: Data collection: enumerator's guidelines

#### Preparing for a survey

Before approaching potential respondents, enumerators should be prepared and confident. A few basic guidelines are useful. Survey preparation steps are summarized in Table 5.

CONSIDERATIONS ARISING FROM LOCAL COVID-19 RESTRICTIONS AND PUBLIC HEALTH GUIDANCE WILL CHANGE THE SURVEY PROTOCOL DESCRIBED HERE.

- Enumerator training will take the local situation into account. National Data Coordinators will take local requirements into consideration when developing their national rATA deployment plan.
- Table 5 provides guidelines that are suitable if there are *no major disruptions to physical distancing requirements or movement, and the survey is conducted in household interviews*. They are a guide to support refinement of a local plan.

**Table 5: Enumerator guidelines: survey preparation and implementation**

Survey preparation step	Considerations for enumerators	Checklist Comment in the space below
<b>Preparation before conducting interviews</b>	<ul style="list-style-type: none"><li>– Participate in training</li><li>– Practice with the questionnaire during training and piloting to memorize as much of it as possible in order to make the real-life interviews run as smoothly as a natural conversation</li><li>– Ask questions or report concerns to trainers or team managers as appropriate</li></ul>	
<b>Preparing materials</b>	<p><b>Device management</b></p> <ul style="list-style-type: none"><li>– Be responsible for ensuring cell phones, tablets and back-up power sources are fully charged and working</li><li>– Report any issues with the tablet/phone functionality as they arise</li><li>– Ensure device is dry, stored safely, and data management is done according to the instructions provided</li></ul> <p><b>Survey tools – be responsible for preparation of:</b></p> <ul style="list-style-type: none"><li>– Information sheets, guides</li><li>– Running sheets</li><li>– Flashcards</li><li>– Notebooks and pens</li><li>– Tablet, charger, water-proof bag, extra power source, wifi, dongles, etc</li></ul>	



<b>Who to survey</b>	<ul style="list-style-type: none"> <li>– Get list of respondents from supervisor</li> <li>– Take notes to make sure that you have enough information to find the right respondent</li> <li>– Work with local assistants and Survey Manager/ Supervisor to find out the best way to approach and meet respondents</li> </ul>
<b>Approaching households</b>	<p><b>Cultural sensitivities</b></p> <ul style="list-style-type: none"> <li>– Recall and be prepared for responses that involve potentially sensitive issues such as sexual health</li> <li>– Recognize the importance of private interviews, and potential sensitivities in requesting private interviews (especially with women and girls)</li> <li>– Work with other enumerators to match female enumerators to women and girl respondents where possible, especially where customs would normally expect that</li> <li>– Identify yourself and state the reason for your visit</li> <li>– Verify that you are meeting the right respondent</li> </ul>
<b>Repeat visits if unavailable</b>	<p><b>WHO recommends that no more than three visits be attempted. If any (or all) usual household members are unavailable:</b></p> <ul style="list-style-type: none"> <li>– Fill in the rATA part A, including number of visits</li> <li>– If possible, find out if any household members are expected to return (for example, from a neighbour)</li> <li>– Return at convenience or arranged time for the interview</li> <li>– Stop returning after three attempts and report the case to your Supervisor</li> </ul>
<b>Preliminary questions and answers</b>	<p>Be prepared to answer respondents' questions when you first meet. The starting point is to offer the participant an information sheet, recall additional information provided in training, or refer to survey manager/coordinator. Frequently asked questions may include:</p> <ul style="list-style-type: none"> <li>– <i>Do you have approval from local authorities to conduct the survey?</i> Describe local approvals</li> <li>– <i>Why am I selected for the survey?</i> Describe random sampling</li> <li>– <i>[From non-respondents] Why am I not selected for the survey?</i> Describe random sampling, offer information sheet (even for non-sampled people)</li> <li>– <i>What do you do with my answers after the interview?</i> Anonymous information will be analysed to provide information about assistive products</li> <li>– <i>What is the survey about?</i> The survey is about needs and access to assistive products in [context]<sup>9</sup></li> <li>– <i>Is there any incentive or risks for me as the respondent or my family?</i> There are no incentives, and the survey asks about your health, which for some people might be distressing. (In some surveys, referrals or other information about available services will be provided.)</li> <li>– <i>How do you ensure confidentiality of information that I am providing?</i> We do not record your name, and the information you provide cannot be linked to your address</li> </ul>

<sup>9</sup> It is very important not to elaborate more here. You can discuss who is doing the survey, who you are, the types of questions in the survey, but it is very important that you do NOT mention disability. You can say “we ask questions about your function and how you do daily activities and about any products you use to do that”, for example.

### Setting up the interview

- Provide the information sheet to the respondent to keep (or refer to it again if it was already shared)
- Introduce the survey by reading guidance from the tablet or paper form. Consider: *"Hi, my name is [your name]. I'm working with [name of organization] doing a survey about assistive technology with every person in in this area. I can show you [a document/video/information] about the project"*
- Ensure compliance with specific local obligations, ethical obligations, etc
- Emphasize the confidentiality of information
- Emphasize the respondent's rights, and the potential benefits and potential risks for participating in the survey, e.g. voluntary participation, right to refuse to respond any question, right to pause or stop the interview, right to ask questions
- Ask for consent, using the consent form and/or information provided in the tablet (this is likely to be specific to the survey context, taking into account local requirements)
- Set up a comfortable and private environment for the interview: be mindful about background noise, heat and light, comfort, and privacy. Consider a request for private conversation if there are other people present (exceptions include children and persons who need assistants)

### Conduct during interview

- Be polite and professional
- Ask questions exactly as written (see "Detailed guide to the rATA questionnaire" in the "During deployment" section of this manual)
- Carefully record the answers. Do not rush respondents when they are selecting an answer
- If you are not sure about an answer, ask for clarification
- Respect the respondent and their responses: you can ask for clarification or confirmation but do not challenge answers. You may need to clarify if answers do not match information given earlier
- Show interest in the conversation
- If the respondent does not understand the question, repeat the question slowly and clearly; if the respondent still does not understand, then you can explain a bit about the question. Read the question "hints" carefully - do not read options if the question specifies 'DO NOT READ OPTIONS'.
- Probe, e.g. "Anything else?" or "Any other reason?", after the respondent responds to a multiple-response question, but do not probe response options if not guided
- Politely stop the respondent and bring them back to main conversation if he/she is elaborating too far or talking about irrelevant issues
- Select ONLY ONE response unless it is a multiple-response question, which is indicated by "Select all that apply"

**Note down anything that is unusual or needs further discussion with Survey Manager or survey team in your notebook.**

<b>Ethical conduct during interviews</b>	<ul style="list-style-type: none"> <li>- Be truthful in your responses to questions from respondents and others in the community: You should be comfortable saying “I don’t know” if you really don’t; check with your Supervisor to see if they can help with important questions</li> <li>- Respect the respondents, their family and community: acknowledge that they are helping you to collect data</li> <li>- Do not promise anything that is beyond the scope of the project or you may not be able to keep</li> <li>- Identify risk situations, assess and respond. Remember the “do no harm” principle: if you observe harm to the respondent, harm to enumerators or the survey team, report any such situation to your Supervisor</li> <li>- Be sensitive to feelings of respondents, especially when they are upset or distressed: you may offer to skip the question, pause or stop the interview, or provide information about referrals (provided in information sheet)</li> </ul>
<b>DO NOT!</b>	<ul style="list-style-type: none"> <li>- <b>Provide long explanations or irrelevant information</b></li> <li>- <b>Provide unnecessary reinforcement or comment, e.g. “that’s very good” or “you should do x or y”</b></li> <li>- <b>Prompt or suggest an answer or response option unless it is guided to do so. Guidance is clear in the question text</b></li> <li>- <b>Show response options to the respondent unless guided</b></li> <li>- <b>Respond on behalf of, or influence, the respondent</b></li> <li>- <b>Change question wordings or deviate from the question</b></li> <li>- <b>Skip a question even if it sounds like another one</b></li> <li>- <b>Combine two or more questions into one</b></li> <li>- <b>Change sequence of the questions</b></li> <li>- <b>Rush or dominate the respondent</b></li> </ul>
<b>After the interview</b>	<ul style="list-style-type: none"> <li>- Remain at the site for a short while to complete self-administered information</li> <li>- Take quick notes if necessary</li> <li>- Thank the respondent and end the interview politely</li> <li>- Provide an opportunity for the respondent to ask questions and respond if you can</li> <li>- End the interview with a light conversation or a compliment</li> </ul>
<b>At the end of the day</b>	<ul style="list-style-type: none"> <li>- Complete any outstanding forms, using notes or other information. Check for completeness, legibility. Make further notes if necessary.</li> <li>- Recap of the day: share your experience and questions with the team, respond to your Supervisor’s questions</li> </ul>

## Interviewing people with difficulty communicating or answering questions

**Table 6: General guidance for interviewing persons with disabilities**

Consideration	Guideline for interviewing	Checklist <i>Comment in the space below</i>
<b>Address the respondent</b>	<ul style="list-style-type: none"> <li>– Address the respondent directly. Ask them questions about how they would like to be interviewed. Even if someone doesn't respond, try to "listen".</li> <li>– For all people, <u>but especially people with disability or difficulty communicating</u>, turn and face them, speak clearly, and be flexible in your communication style</li> <li>– Even if a proxy is interviewed, or someone else is listening and helping, questions should be directed to the respondent, while being respectful and polite to the proxy respondent</li> <li>– Refer to the respondent as "you", and not "they". In your language, choose the pronoun that is the most polite</li> </ul>	
<b>Check if your interview method is appropriate</b>	<p><b>There are many reasons people might not understand your questions. It is important to check whether it is because of difficulty hearing, understanding, concentrating, or communicating responses</b></p> <ul style="list-style-type: none"> <li>– Check (by asking, listening and observing) whether the respondent has difficulty understanding the purpose of the survey, what they will need to do, and the rATA questions</li> <li>– Check (by asking, listening and observing) if the respondent has difficulty hearing. Ask them (verbally, even if they cannot hear) how they would like to be interviewed. Consider asking them to read the rATA questions on the device, or on a paper version</li> <li>– Ask whether respondents use any assistive device or might want help from someone else for the interview and address this request if possible</li> </ul>	
<b>Interview conduct</b>	<ul style="list-style-type: none"> <li>– For all people, sit at eye level and ensure they are comfortable. This is especially important for people who use wheelchairs or other assistive technology, or who sit in a particular way on the floor, chair, or other equipment</li> <li>– Be sensitive to the health and feelings of the respondent, but do not over-care or help without asking permission first</li> <li>– Speak clearly and loudly enough; but do not yell unless someone tells you that is how they might be able to hear you</li> <li>– Make sure that you have enough light when showing the showcards</li> <li>– Have large-print versions of showcards available to give to people with low vision</li> <li>– Be sensitive, patient, and give respondents enough time to think about and share their answer in their own way</li> </ul>	

## Guidance for interviewing by proxy

**Table 7: Guidance for proxy interviews**

Consideration	Guideline for interviewing	Checklist <i>Comment in the space below</i>
<b>The proxy as a last option</b>	<ul style="list-style-type: none"> <li>ONLY use proxy as the last option or if it is unavoidable, e.g. interviewing children<sup>10</sup> or persons who cannot communicate with the enumerator directly</li> </ul>	
<b>Providing information to proxies</b>	<ul style="list-style-type: none"> <li>Provide all information to the third person as the respondent</li> <li>Request the third-person to respect the confidentiality principle, i.e. do not share any part of the conversation with other people</li> <li>If the proxy states that s/he cannot do that, discuss the importance of privacy, then politely end the interview if s/he disagrees</li> </ul>	
<b>Courtesy for respondents and proxies</b>	<ul style="list-style-type: none"> <li>Get response directly from the respondent as much as possible. Clearly state this principle to the proxy/third-person; apologize if they feel it is rude, and reinforce that it is required, even if it is not how they normally communicate</li> <li>Keep reminding the proxy that they are responding on behalf of the respondent, not themselves. This is especially important for more subjective questions, especially concerning difficulties and satisfaction</li> </ul>	

## B: Detailed guide to the rATA questionnaire

There are five main rATA sections. Each section requires slightly different question styles and some guidance might change depending on how the rATA is implemented.

### Part A – Preliminary information / administrative survey data <sup>11</sup>

The first part of the rATA records basic information about the respondent. Sex, age and name should be asked as questions according to the instructions in the table below. Some of the information, especially PIN, Household ID, the enumerator name, and date and time, should be entered before the interview starts. The exact process of asking these questions might vary slightly depending on the survey design and the consent process required in your survey context.

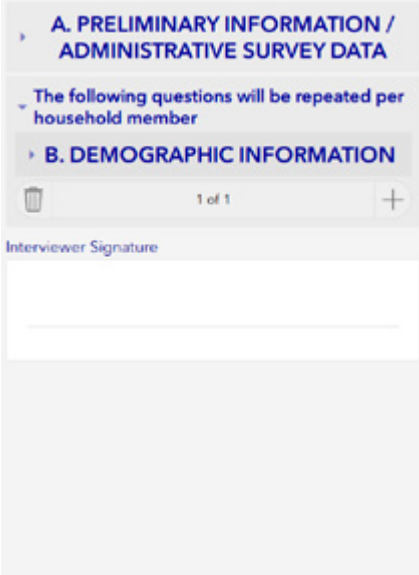
- An asterisk after the question (\*) means the question is required. The survey cannot be submitted unless the question is answered.
- Options with a circle (O) are SELECT ONE OPTION questions
- Options with a square like this - ☐ - are SELECT ALL THAT APPLY questions (but there may be constraints on particular combinations)

<sup>10</sup> All children under the age of 15 will be interviewed by proxy, normally by the primary caregiver. Children between 12 – 15 years of age can be present and participate during the interview with the proxy. Children between 15 and 18 years of age can be interviewed on their own provided that the parents or primary caregiver provides consent. However, local customs, laws and organisational policies concerning child protection in particular, might affect the survey plan in your context.

<sup>11</sup> Section Part A and section Part B present instructions for the rATA questionnaire customized for the national representative household survey design, which includes more administrative information than in the standard rATA questionnaire.

Qn.	Question text	TYPE/OPTIONS	Instructions
a.1	<b>Location*</b>	GPS (satellite location)	<ul style="list-style-type: none"> <li>- If your device is configured correctly, a location is automatically recorded</li> <li>! If your device does not have a clear view of the sky, it may not load a location</li> </ul>
a.2	<b>Date of Interview*</b>	Calendar / time	<ul style="list-style-type: none"> <li>- The current time and date are pre-loaded. You may need to change it if your device is providing incorrect information (stop and correct before the next survey if possible)</li> </ul>
a.3	<b>Enumerator's ID:*</b>	Select ONE	<ul style="list-style-type: none"> <li>- According to survey instructions, enter full name OR unique identification</li> <li>- You will see either your name, or a code that you will be allocated in the options</li> <li>! This information helps survey coordinators follow up with any questions</li> </ul>
a.4	<b>Country*</b>	Select ONE	<ul style="list-style-type: none"> <li>- Select your country (if not automatic in your survey)</li> </ul>
a.5	<b>Province*</b>	Select ONE	<p><b>Select the province</b></p> <ul style="list-style-type: none"> <li>- Your survey coordinator will allocate your survey team to the right provinces and give each province a code. Enter that code here</li> <li>- "Province" will have different meanings in different surveys - this will be clear to you before commencing your survey</li> <li>! If your province does not match the geolocation or survey time, your supervisor may need to follow up to understand the mis-match</li> </ul>
a.6	<b>District*</b>	Select ONE	<p><b>Select the district</b></p> <ul style="list-style-type: none"> <li>- Your survey coordinator will allocate your survey team to the correct districts (within provinces), and give each province a code. Enter that code here</li> <li>- As is often the case for provinces, "districts" also might have a different name locally</li> </ul>
a.7	<b>Village*</b>	Select ONE	<p><b>Select the village</b></p> <ul style="list-style-type: none"> <li>- Your survey coordinator will allocate your survey team to the correct villages (within districts), and give each village a code. Enter that code here</li> <li>- As for provinces and districts, "villages" might have a different name locally</li> </ul>
a.8	<b>Household number*</b>	Select ONE	<p><b>Enter household number</b></p> <ul style="list-style-type: none"> <li>- Households will be numbered sequentially within a cluster. The first house surveyed is household 001, the second 002</li> <li>- Different teams within a cluster might be allocated different household codes, like 101, 102, or 301, 302 etc to distinguish their households from other teams' households. Your coordinator will describe the local arrangements</li> <li>! It is essential that every individual household has a unique household number</li> </ul>
a.9	<b>Household size*</b>	Integer	<ul style="list-style-type: none"> <li>- Determines how many people <i>usually</i> live in the household</li> <li>! A household might be defined in different ways - usually a shared roof or cooking space. Your coordinator will specify during training</li> </ul>

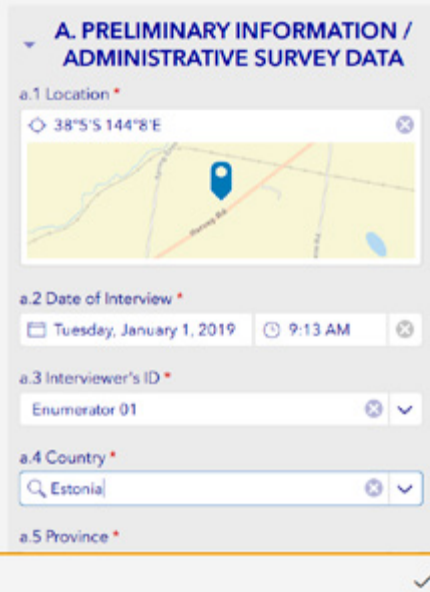
**Figure 3: Opening screen of rATA digital version**



The opening screen of the rATA digital version displays the following elements:

- A. PRELIMINARY INFORMATION / ADMINISTRATIVE SURVEY DATA**
- The following questions will be repeated per household member**
- B. DEMOGRAPHIC INFORMATION**
- A trash icon, a page indicator **1 of 1**, and a plus icon.
- Interviewer Signature** with a text input field.

**Figure 4: Administrative page of rATA**



The administrative page of the rATA digital version displays the following elements:

- A. PRELIMINARY INFORMATION / ADMINISTRATIVE SURVEY DATA**
- a.1 Location \*** with a location input field showing **38°5'S 144°8'E** and a map view.
- a.2 Date of Interview \*** with a date input field showing **Tuesday, January 1, 2019** and a time input field showing **9:13 AM**.
- a.3 Interviewer's ID \*** with a dropdown menu showing **Enumerator 01**.
- a.4 Country \*** with a dropdown menu showing **Estonia**.
- a.5 Province \***
- A checkmark icon at the bottom right.

(Note: many questions and sections require scrolling down the screen)

**Figure 5: List of products used for USE and NEED questions**

**D. DEMAND AND SUPPLY**

d.1 Do you currently use any assistive product(s)? \*

☒ Yes ☐ No

d.2 Which products do you use?  
Select all that apply

**Mobility products**

- ☐ Axillary Elbow Crutches
- ☐ Canes/Sticks, Tripod And Quadripod
- ☐ Club Foot Braces
- ☐ Manual Wheelchairs - Basic Type For Active Users
- ☐ Wheelchairs, Manual With Postural Support
- ☐ Manual Wheelchairs - Push Type
- ☐ Wheelchairs, Electrically Powered
- ☐ Orthoses (Upper Limb)
- ☐ Orthoses (Lower Limb)

(Note, requires scrolling down)

## Part B – Demographic information

Part B moves from information about the overall household to information about the specific person. It provides a basic set of individual information to help understand who is answering the question.

b.1	<b>Interview start time</b>	Verify date and time of interview	<ul style="list-style-type: none"> <li>– The device will pre-load a date and time using the device clock</li> </ul>
b.2	<b>Informed consent received</b>	<p><input type="radio"/> 1 = Yes</p> <p><input type="radio"/> 2 = No</p>	<ul style="list-style-type: none"> <li>– If NO is selected, the survey ends</li> <li>– The process for requesting and getting consent will vary according to local plans, but always involves a) providing information about the survey; b) ensuring the person understands the survey; c) determining the person agrees to proceed and that they understand it is not compulsory</li> </ul>



b.3	<b>Individual number*</b>  <i>Sequential in household</i>	Integer	<p><b>Individual number</b></p> <ul style="list-style-type: none"> <li>Individuals are sequential within households. First interviewed person (regardless of who they are) is 001. Next is 002 etc</li> <li>If more than one enumerator is surveying a household, they should coordinate to avoid duplicate individual numbers</li> </ul>
b.4	<b>Respondent's ID:</b>	Unique ID is generated by the device. For e.g. 012.345.678.09.01	<ul style="list-style-type: none"> <li>The survey generates a unique ID based on previous information</li> <li>You may be asked to enter this unique ID into a separate sheet to document who you have interviewed</li> </ul> <p><b>! EVERY respondent needs a UNIQUE individual ID</b></p>
b.5	<b>How old are you? *</b>	Integer	<ul style="list-style-type: none"> <li>Ask "how old are you" and enter result if answer given in years</li> <li>If a date of birth is given, ask for age in years, or take a moment to calculate the likely age, and confirm if possible</li> <li>Enter age in years</li> <li>! The answer provided will impact the need to get parental/guardian consent, or to interview the respondent as a child through a proxy.</li> </ul>
b.6	<b>What is your gender? *</b>  <i>Do not read options</i>	<ul style="list-style-type: none"> <li>○ 1 = Male</li> <li>○ 2 = Female</li> <li>○ 3 = Non-binary, intersex, other not specified</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li><b>Ask if not obvious or there is any doubt.</b> Ask "how would you like me to record your sex" if any uncertainty, or as a courtesy in some cultural contexts</li> <li>Enter the gender of the respondent</li> <li>Select ONE</li> </ul>

**Figure 6: First page of section D, Needs assessment**

**C. NEED**

c.1 Without assistance or support from any people or equipment, do you have difficulty sitting, standing, walking or climbing steps? Would you say you have: \*

*(e.g. sitting without support, standing up from a chair, walking independently inside or outside the house, or climbing steps)*

● — ● — ● — ● — ●

No difficulty    Some difficulty    A lot of difficulty    Cannot do at all    Not disclosed (do not read)

c.2 Do you have difficulty seeing, without using any devices? \*

*(e.g. reading books, newspapers, smart phone or signs, or identifying people across the road)*

● — ● — ● — ● — ●

No difficulty    Some difficulty    A lot of difficulty    Cannot do at all    Not disclosed (do not read)

c.3 Do you have difficulty hearing, without using any products? \*

**Figure 7: First page of section E, Satisfaction section**

**E. SATISFACTION**

e.1.1 Over the last month, how satisfied are you with Canes/Sticks, Tripod And Quadripod?

*(In terms of size, fit, comfort, weight, appearance, safety and durability)*

● — ● — ● — ● — ● — ●

Very dissatisfied    Dissatisfied    Neither satisfied nor dissatisfied    Quite satisfied    Very satisfied    Refused / Don't know (do not read)

e.1.2 Over the last month, how satisfied are you with Spectacles; Low-Vision, Short/Long Distance/ Filters Etc?

*(In terms of size, fit, comfort, weight, appearance, safety and durability)*

● — ● — ● — ● — ● — ●

Very dissatisfied    Dissatisfied    Neither satisfied nor dissatisfied    Quite satisfied    Very satisfied    Refused / Don't know (do not read)

e.2.1 Thinking about your Canes/Sticks, Tripod And Quadripod, how satisfied are you with the

## Part C – Need

The aim of Part C – Needs, is to determine self-reported functioning in key domains. There are six questions. All questions and options should be read aloud to all consenting respondents, using some examples and prompts as necessary.

Qn.	Question text	TYPE/ OPTIONS	Instructions
-	<b>General comments for part C, all questions</b>		<ul style="list-style-type: none"> <li>For all section C questions, read question and options aloud</li> <li>Do NOT refer to disability, even if the respondent does</li> <li>Read provided response prompts if necessary</li> <li>Questions relate to difficulty because of a HEALTH PROBLEM, which includes difficulties that the participant might not identify as a health problem, for example, congenital limb differences, injury, genetic issues, etc. Health is very broadly defined, but distinguishes from other difficulties, for example, finding it difficult to walk because of fear of traffic, or difficulty hearing due to living in a noisy environment, for example.</li> <li>rATA WGSS response category: “some difficulty”: Even after translation, careful attention should be paid to this response option. In some languages, “some” can mean “rarely”, while in another language it may mean “frequently” or “a lot”</li> <li>The Washington Group provides comprehensive guidance on these questions in their documentation</li> </ul>
-	The next questions ask about difficulties you may have doing certain activities because of a HEALTH CONDITION		<ul style="list-style-type: none"> <li>This is standard text before the next questions</li> <li><b>! Read the text aloud before c.1</b></li> </ul>

c.1	<p><b>Without assistance or support from any people or equipment, do you have difficulty sitting, standing, walking or climbing steps? Would you say you have [read options]? *</b></p> <p><i>(e.g. sitting without support, standing up from a chair, walking independently inside or outside the house, or climbing steps)</i></p>	<ul style="list-style-type: none"> <li>○ 0 = No difficulty</li> <li>○ 1 = Some difficulty</li> <li>○ 2 = A lot of difficulty</li> <li>○ 3 = Cannot do at all</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read all options aloud</li> <li>- Read prompt examples if necessary</li> <li>- Refers to sitting, standing, walking or climbing <u>without</u> using any AT</li> <li>- Difficulty is any problem the respondent identifies with sitting, standing, walking or climbing steps</li> </ul>
c.2	<p><b>Do you have difficulty seeing? *</b></p> <p><i>e.g. reading books, newspapers, smart phone or signs, or identifying people across the road)</i></p>	<ul style="list-style-type: none"> <li>○ 0 = No difficulty</li> <li>○ 1 = Some difficulty</li> <li>○ 2 = A lot of difficulty</li> <li>○ 3 = Cannot do at all</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read prompt examples if necessary</li> <li>- Refers to seeing without using any AT</li> <li>- Difficulty is any problem the respondent identifies with seeing</li> </ul>
c.3	<p><b>Do you have difficulty hearing? *</b></p> <p><i>(e.g. hearing when others talk or when answering the phone)</i></p>	<ul style="list-style-type: none"> <li>○ 0 = No difficulty</li> <li>○ 1 = Some difficulty</li> <li>○ 2 = A lot of difficulty</li> <li>○ 3 = Cannot do at all</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read prompt examples if necessary</li> <li>- Refers to hearing <u>without</u> using any AT</li> <li>- Difficulty is any problem the respondent identifies with hearing</li> </ul>
c.4	<p><b>Do you have difficulty speaking or communicating? *</b></p> <p><i>(e.g. understanding others or being understood)</i></p>	<ul style="list-style-type: none"> <li>○ 0 = No difficulty</li> <li>○ 1 = Some difficulty</li> <li>○ 2 = A lot of difficulty</li> <li>○ 3 = Cannot do at all</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read prompt examples if necessary</li> <li>- Refers to speaking or communication without using any AT</li> <li>- Refers to customary or usual language</li> </ul>
c.5	<p><b>Do you have difficulty remembering or concentrating? *</b></p> <p><i>(e.g. forgetting appointments or medication, losing track of time, or difficulty finding places)</i></p>	<ul style="list-style-type: none"> <li>○ 0 = No difficulty</li> <li>○ 1 = Some difficulty</li> <li>○ 2 = A lot of difficulty</li> <li>○ 3 = Cannot do at all</li> <li>○ 88 = Not disclosed (do not read)</li> </ul>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read prompt examples if necessary</li> <li>- The difference between “remembering” and “concentrating” may be difficult to translate and/or may not have direct equivalents in the target language</li> <li>- Note the “or”; difficulty with either function should be recorded</li> <li>- Remembering is about recalling important major events, or daily tasks, not about being able to memorize things like phone numbers or trivia</li> </ul>

c.6	<p><b>Do you have difficulty with your self-care?*</b></p> <p><i>(e.g. eating, dressing, bathing or toileting)</i></p>	<p><input type="radio"/> 0 = No difficulty</p> <p><input type="radio"/> 1 = Some difficulty</p> <p><input type="radio"/> 2 = A lot of difficulty</p> <p><input type="radio"/> 3 = Cannot do at all</p> <p><input type="radio"/> 88 = Not disclosed (do not read)</p>	<ul style="list-style-type: none"><li>- Select ONE</li><li>- Read prompt examples if necessary</li><li>- This question is to understand difficulty being independent with daily self-care tasks</li><li>- In some contexts, this question can be sensitive. For example, the question may be judged as implying the person has a low level of personal hygiene</li></ul>
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## Part D – Demand and supply

Part D of the rATA measures **key elements of the demand and supply** of 50 prioritized assistive products plus any relevant “other” products used or needed by respondents.

To facilitate the use of the rATA across countries and with a range of respondents, images and descriptions of key products are provided. The images are used by the enumerator to accurately identify and select products that **are or could be** used by the respondent.

The first part of section D determines which products are used. Additional sections are generated for **up to three** products.

Qn.	Question text	TYPE/OPTIONS	Instructions
d.1	<b>Do you currently use any assistive product(s)? *</b>	<input type="radio"/> 0 = NO -> Go to d.9 <input type="radio"/> 1 = YES	<ul style="list-style-type: none"> <li>Select one. You may need to discuss whether products are assistive technology products or not. If in doubt, compare with product chart, list, and enter in “other” if not in the list</li> <li>If a discussion starts about products, move to the next question after selecting “YES”</li> </ul>
d.2	<b>Which products do you use? *</b>  <i>(If “YES”, tick the ones being used)</i> <i>(Show the poster or GIF file – read and/or describe the images to person with visual impairment)</i>	List of 50 products + other	<ul style="list-style-type: none"> <li>USE SHOWCARDS/POSTER/IMAGEBOOK AND SELECT ALL THAT APPLY FROM d.2 PRODUCT LIST</li> <li>Take your time</li> <li>Ask other team members if necessary</li> <li>Select all products that are currently used</li> <li>Do not record products that were previously used (whether discarded, broken, upgraded, whether or not the person still owns the device)</li> <li>The intent is to capture different products in use. For each product, there are many varieties – capture the closest match, or note in question d.2.</li> </ul>
d.3	<b>How many other products do you use?</b>	Integer	<ul style="list-style-type: none"> <li>Relevant if “other” is selected in d.2</li> <li>Discuss with the respondent and enter the number of other products used</li> </ul>
d.3n.1	<b>What is the name of your <u>first</u> other product?</b>  <i>If the respondent doesn’t know the name, offer assistance. If not known/uncertain, describe in words, “i.e modified spoon with rubber, used for eating”</i>	TEXT	<ul style="list-style-type: none"> <li>Enter the best estimate of the name of the product</li> </ul>

d.3p.1	<p><b>Take a photo after obtaining permission and save with ID no.</b></p> <p><i>If yes -&gt; take picture</i></p>	IMAGE	<ul style="list-style-type: none"> <li>- If permission is given, take a picture</li> <li>- Make sure the product is clearly visible in the picture, which may mean taking the image near a window or light if possible</li> <li>- Move the product away from people if you can. If it is being used, ask to move it, in order not to photograph individuals' faces or any potentially sensitive body parts - <u>even if the respondent does not mind being in the image</u></li> <li>- If you cannot take a picture without avoiding any sensitive images, do not take a picture at all</li> </ul>
d.4		<p><i>This question is used to calculate the number of products. No entry is necessary.</i></p>	<ul style="list-style-type: none"> <li>- This is used to calculate the number of products only. No user entry is required.</li> </ul>
<i>Repeats for up to 3 "other" assistive products</i>			
d.5	<p><b>Considering all the products you used, please select the three most important products</b></p>	<p>Select up to three from all previous products selected (including "other" products)</p>	<ul style="list-style-type: none"> <li>- This question only applies if the respondent has selected more than 3 products in use.</li> <li>- discuss the 3 most important products. <b><u>Only consider products chosen already.</u></b></li> <li>- Discuss the "most important" as the respondent understands it. It might involve which are the most commonly used, which make the most difference, which would be hard to replace, and other factors.</li> </ul>

Part D continues in this section of the survey to determine sources, payers, distance travelled for up to three products

Qn.	Question text	TYPE/OPTIONS	Instructions
d.6.1	<b>Where did you get [name of product 1, 2 or 3] from?</b>  <i>Select all that apply</i>	<input type="checkbox"/> 1 = Public sector: Government facility, public hospital <input type="checkbox"/> 2 = NGO sector: Non-profit facility <input type="checkbox"/> 3 = Private sector: private facility/ hospital/clinic/ shop/store <input type="checkbox"/> 4 = Friends/family <input type="checkbox"/> 5 = Self-made <input type="checkbox"/> 87 = Other <input type="checkbox"/> 88 = Don't know	<ul style="list-style-type: none"> <li>- SELECT ALL THAT APPLY</li> <li>- The name of the first product should appear in the question – if not, this is the FIRST product selected in d.5</li> <li>- DO NOT READ the response options – prompt if required</li> <li>- Select multiple options if relevant</li> <li>- These questions are asked about specific products if at least one product is selected in d.2</li> <li>- This question explores the original source; it is not uncommon for products to be provided within families or neighbourhoods, in which case “friends/ family” would be the appropriate option</li> <li>- This question refers only to products selected in question D.2. Do not specify source of products no longer in use</li> <li>- Clarify by reading response options if necessary</li> </ul>
d.6.1o	<b>Specify other source of this product</b>	TEXT	If “other” selected in d.6.1
<i>Repeats for up to 3 assistive products</i>			



d.7.1	<b>Who paid for [name of product 1, 2 or 3]?</b> <i>Select all that apply</i>	<input type="checkbox"/> 1 = Government <input type="checkbox"/> 2 = NGO/Charity <input type="checkbox"/> 3 = Employer/School <input type="checkbox"/> 4 = Insurance <input type="checkbox"/> 5 = Paid out-of-pocket (self) <input type="checkbox"/> 6 = Family / friends <input type="checkbox"/> 87 = Other <input type="checkbox"/> 88 = Don't know	- SELECT ALL THAT APPLY - DO NOT READ the response options - prompt if required - Select multiple options if relevant - A payer is anyone or any group/organization who paid for the product - Payment for services or transport related to the product are NOT included. i.e. if someone paid for transport to get the product, it is not included. Do NOT count who paid for insurance, if insurance is selected
d7.1o	<b>Specify other payer of [name of product 1, 2 or 3]?</b>	TEXT	- If OTHER chosen in d.7.1
<i>Repeats for up to 3 assistive products</i>			
d.7.4	<b>Can you estimate the amount you paid for assistive products in the last 12 months?</b>	Integer	- Estimated cost in local currency for all products the respondent currently uses or has - Include cost paid by the respondent or the immediate family of the respondent only
d.8.1	<b>How far did you have to travel to get [name of product 1, 2 or 3]?</b>	<input type="radio"/> 1 = Less than 5 km <input type="radio"/> 2 = 6-25 km <input type="radio"/> 3 = 26-50 km <input type="radio"/> 4 = 51-100 km <input type="radio"/> 5 = More than 100 km <input type="radio"/> 88 = Don't know	- Refers to the maximum distance for each product recorded in d.2 - Select ONE
<i>Repeats for up to 3 assistive products</i>			

This section includes ONE question concerning overall barriers to any unmet needs.

d.9	Question text	TYPE/OPTIONS	Instructions
	<p><b>Do you think you need any assistive product(s) that you do not currently use, or you currently use but it needs to be replaced?</b></p>	<p><input type="radio"/> 0 = NO -&gt; Go to e.1.1</p> <p><input type="radio"/> 1 = YES</p>	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Note the "OR" – we are interested in products that need to be replaced, as well as products that the respondent does not have. In other words, if someone uses crutches, they may choose crutches here, indicating that they <u>need to be replaced</u></li> <li>- Only record need <u>for the respondent</u>, and not for someone else such as a friend or family member. This is not a valid <u>need for the purpose of this survey</u></li> <li>- Clarify, if necessary, with "consider your answers to my questions about your functioning. Have you or your family considered any of these products to help with those activities?"</li> <li>- The intent is for respondents to self-identify products. Record their answers, without judgement or correcting their choices</li> </ul>
d.10	<p><b>Which products do you think you need?</b></p> <p><i>(Tick the ones identified)</i>  <i>(Show the poster or GIF file – read and/or describe the images to person with visual impairment)</i></p>	<p>USE SHOWCARDS AND SELECT ALL THAT APPLY FROM d.2 PRODUCT LIST</p>	<ul style="list-style-type: none"> <li>- Clarify, if necessary, with "consider your answers to my questions about your functioning. Have you or your family considered any of these products to help with those activities?"</li> <li>- The intent is for respondents to self-identify products. Record their answers, without judgement or correcting their choices</li> </ul>

This section includes ONE question concerning overall barriers to any unmet needs.

Qn.	Question text	TYPE/OPTIONS	Instructions
d.11	<b>Why don't you have the assistive product(s) you need?</b>  <i>Select all that apply</i>	<input type="checkbox"/> 1 = Not available <input type="checkbox"/> 2 = Not suitable <input type="checkbox"/> 3 = Lack of transport / too far <input type="checkbox"/> 4 = Lack of time <input type="checkbox"/> 5 = Lack of support <input type="checkbox"/> 6 = Cannot afford <input type="checkbox"/> 7 = Stigma/ shyness <input type="checkbox"/> 87 = Other <input type="checkbox"/> 88 = Do not know about AP	<ul style="list-style-type: none"> <li>- DO NOT READ RESPONSES</li> <li>- Prompt if necessary</li> <li>- Select all that apply</li> <li>- This question relates to ANY barrier to ANY product for which an unmet need is expressed</li> </ul>
d.11o	<b>Specify other barrier</b>	TEXT	<ul style="list-style-type: none"> <li>- If selected "OTHER" in d.11</li> <li>- Enter other barriers in text</li> </ul>

## Part E – Satisfaction

Part E of the rATA asks respondents to rate their satisfaction with the assistive products and services they use (including services that facilitated their access to assistive products and any maintenance and follow-up services they may have used). Finally, suitability of assistive products used, activity levels and participation and overall wellbeing are explored.

Each of the questions in this section repeat for up to 3 of the most important products.

e.1	<b>Over the last month, how satisfied are you with your [name of product 1, 2 or 3]?</b>	<ul style="list-style-type: none"> <li><input type="radio"/> 1 = Very dissatisfied</li> <li><input type="radio"/> 2 = Dissatisfied</li> <li><input type="radio"/> 3 = Neither satisfied nor dissatisfied</li> <li><input type="radio"/> 4 = Quite satisfied</li> <li><input type="radio"/> 5 = Very satisfied</li> <li><input type="radio"/> 88 = Refused / don't know (Do not read)</li> </ul>	<ul style="list-style-type: none"> <li>– Select ONE</li> <li>– Read the question out loud</li> <li>– Read all response options out loud</li> <li>– Read the prompt remarks if necessary</li> <li>– Focus on the relevant product (first, second, third, if more than one product is used)</li> <li>– If answer is 1 or 2, follow-up questions (e.1.4 and e.1.4o) will be asked</li> </ul>
e.2	<b>Thinking about your [name of product 1, 2 or 3], how satisfied are you with the assessment and training you received?</b>	<ul style="list-style-type: none"> <li><input type="radio"/> 1 = Very dissatisfied</li> <li><input type="radio"/> 2 = Dissatisfied</li> <li><input type="radio"/> 3 = Neither satisfied nor dissatisfied</li> <li><input type="radio"/> 4 = Quite satisfied</li> <li><input type="radio"/> 5 = Very satisfied</li> <li><input type="radio"/> 88 = Refused / don't know (Do not read)</li> </ul>	<ul style="list-style-type: none"> <li>– Select ONE</li> <li>– Read the question out loud</li> <li>– Read all response options out loud</li> <li>– Read the prompt remarks if necessary</li> <li>– The aim is to elicit overall satisfaction with services related to all products currently used</li> <li>– Clarify if necessary by repeating the question “overall, how satisfied are you with your experience getting and using [the product]”</li> <li>– If answer is 1 or 2, follow-up questions (e.2.4 and e.2.4o) will be asked</li> </ul>
e.3	<b>Please think about your [name of product 1, 2 or 3]. How satisfied are you with the repair, maintenance and follow-up services based on your last experience?</b>	<ul style="list-style-type: none"> <li><input type="radio"/> 1 = Very dissatisfied</li> <li><input type="radio"/> 2 = Dissatisfied</li> <li><input type="radio"/> 3 = Neither satisfied nor dissatisfied</li> <li><input type="radio"/> 4 = Quite satisfied</li> <li><input type="radio"/> 5 = Very satisfied</li> <li><input type="radio"/> 88 = Refused / don't know (Do not read)</li> </ul>	<ul style="list-style-type: none"> <li>– Select ONE</li> <li>– Read the question out loud</li> <li>– Read all response options out loud</li> <li>– The aim is to elicit overall satisfaction with repair and maintenance related to all products currently used</li> <li>– Clarify if necessary by repeating the question “overall, considering any products you currently use, how satisfied were you with the last time you needed repairs, maintenance or other follow up”</li> <li>– Skip if no follow up was required</li> </ul>

e.4	<b>Is your [name of product 1, 2 or 3] suitable for your home and surroundings?</b>	<input type="radio"/> 1 = Very dissatisfied <input type="radio"/> 2 = Dissatisfied <input type="radio"/> 3 = Neither satisfied nor dissatisfied <input type="radio"/> 4 = Quite satisfied <input type="radio"/> 5 = Very satisfied <input type="radio"/> 88 = Refused / don't know (Do not read)	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read the question out loud</li> <li>- Read all response options out loud</li> <li>- Suitable refers to any issues or problems the respondent identifies related to the use of any of their products, used at home or local surroundings. Local surroundings are places likely to be visited on a near-daily basis (shops, work, neighbours, civic spaces)</li> </ul>
e.5	To what extent does your [name of product 1, 2 or 3] help you to do what you want?  <i>(In terms of doing household activities, self-care, going to school, college or work, visiting friends or neighbours or going for leisure and recreation)</i>	<input type="radio"/> 1 = Not at all <input type="radio"/> 2 = Not much <input type="radio"/> 3 = Moderately <input type="radio"/> 4 = Mostly <input type="radio"/> 5 = Completely <input type="radio"/> 88 = Refused / don't know (Do not read)	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read the question out loud</li> <li>- Read all response options out loud</li> <li>- This question includes barriers not related to functioning, such as social stigma, transport problems etc</li> <li>- If answer is 1 or 2, follow-up questions (e.5.4 and e.5.4a) will be asked.</li> </ul>
e.6	Thinking about the places you need to visit like schools, work-places, public spaces, can you use [name of product 1, 2 or 3] as much as you want in those places?	<input type="checkbox"/> 1 = Not at all <input type="checkbox"/> 2 = Not much <input type="checkbox"/> 3 = Moderately <input type="checkbox"/> 4 = Mostly <input type="checkbox"/> 5 = Completely <input type="radio"/> 88 = Refused / don't know (Do not read)	<ul style="list-style-type: none"> <li>- Select ONE</li> <li>- Read the question out loud</li> <li>- Read all response options out loud</li> <li>- This question includes barriers not related to functioning, such as social stigma, transport problems etc</li> </ul>

## Part F – Recommendations

Part F consists of open-ended questions and provides respondents with the opportunity to provide suggestions or comments that, in their view, could improve access to AT where they live.

Qn.	Question text	TYPE/OPTIONS	Instructions
f.1 <sup>12</sup>	<b>Do you have any comments regarding any aspects on improving access to assistive product(s) in your country</b>	TEXT	<ul style="list-style-type: none"> <li>- Read question aloud and enter up to 3 short recommendations per respondent</li> <li>- The respondent should discuss options and help decide on 3 main recommendations, if necessary</li> </ul>

<sup>12</sup> This question is optional and can be used at the discretion of the data collection team.

f.2	READ: The survey is now completed. Thank you for your participation.	<input type="checkbox"/> Acknowledge	– Read the statement, and select the box to acknowledge
f.3		<i>Time interview ended (record at the time of hitting "Acknowledge")</i>	– No enumerator input is required

## Part G – Enumerator’s comments and post-survey administration

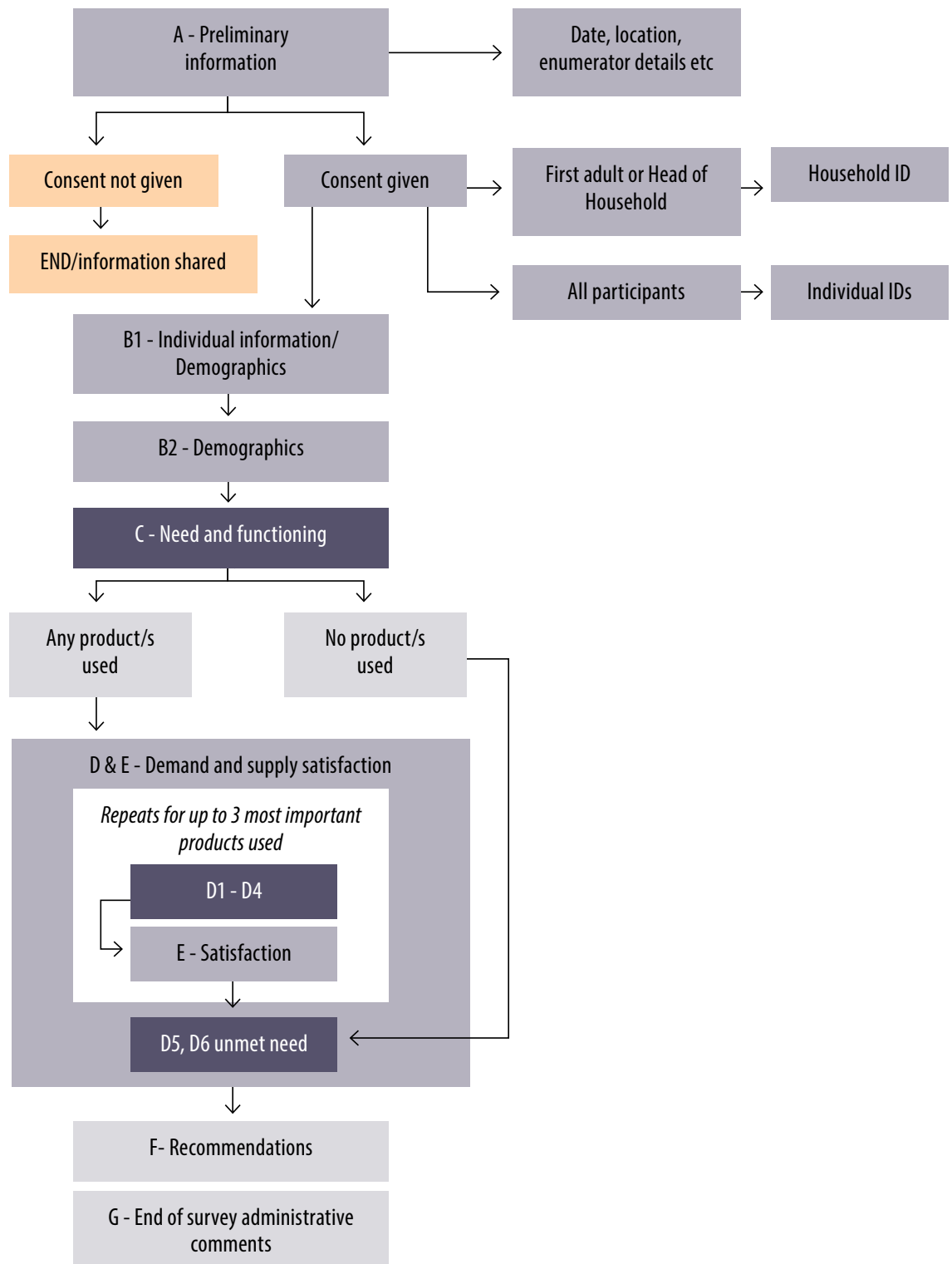
The last part of the rATA tool is used to note whether the interview was conducted by proxy, and for the enumerator to note any issues for follow up. It should be completed after thanking the respondent and ending the formal part of the interview.

Qn.	Question text	TYPE/OPTIONS	Instructions
g.1	<b>Proxy interview:</b>  <i>If any part of the interview completed by proxy</i>	<input type="radio"/> 0 = NO <input type="radio"/> 1 = YES	– Select ONE – If any significant part of the survey was completed by a proxy, select YES
g.2	<b>Enumerator: Should this data be checked, verified, discussed by survey coordinators?</b>  <i>Due to any issues in the questions, options, respondent’s understanding, or any other reason</i>	<input type="radio"/> 0 = NO -> end the survey <input type="radio"/> 1 = YES	– If the enumerator has any concerns they want to highlight to national coordinators, they should note it here
g.3	<b>Please describe issues or points for follow up</b>  <i>End the survey after entering text</i>	TEXT	– If G.2 = YES – Enter comments on any parts of the survey that might need attention, e.g, missed sections, unexpected answers, uncertainty about products, etc

## Skip logic

- Skip logic will be automatically embedded in digital tools and not visible to the enumerator (see Figure 8). No enumerator decisions about skips are necessary. However, all users should understand the main intent of the skip logic.

**Figure 8: rATA skip logic**



## C: Survey management

The previous sections outlined how to get ready for a rATA, and the specifics for every rATA question. This section gives an overview of the main considerations for managing a rATA – by which we mean taking responsibility for and being mindful of the integrity of the survey by ensuring people are doing what is expected of them and taking care of the data appropriately. The most important consideration is the welfare of the community in general and of survey respondents in particular.

Table 9 summarizes the main considerations for all the survey team members. It is important that these skills and capabilities are reinforced through training and practice. Key training materials and activities are also specified.

**Table 9: Survey management considerations for all survey team members**

Consideration	Guideline for survey team members
<b>Managing data</b>	<p><b>National Data Coordinator (NDC)</b></p> <ul style="list-style-type: none"> <li>– Establish data management protocols, taking into account relevant local and international guidance</li> <li>– Enshrine core principles of data integrity, security and privacy</li> <li>– Oversee data management conduct of survey team members</li> <li>– Establish and oversee back-up protocols for key database/s</li> </ul> <p><b>Supervisors</b></p> <ul style="list-style-type: none"> <li>– Monitor conduct of field survey teams</li> <li>– Lead/coordinate enumerator team</li> <li>– Be responsible for sampling procedures at the respective EAs</li> <li>– Solve minor team problems</li> <li>– Report daily to the NDC</li> </ul> <p><b>Enumerators</b></p> <ul style="list-style-type: none"> <li>– Upload data according to instructions</li> <li>– Manage paper surveys, notes, maps, and other information carefully, ensuring data are entered correctly without identifying information</li> </ul>
<b>Responding to adverse events</b>	<p><b>NDC</b></p> <ul style="list-style-type: none"> <li>– Working with local stakeholders, determine possible services for urgent referrals</li> <li>– Determine compulsory reporting obligations (especially for child protection, sexual violence, other) according to local research ethical principles and relevant laws</li> <li>– Establish appropriate communication pathways with all team members</li> <li>– Determine and implement adverse event protocols including a) threats or injuries to survey teams; b) distressed respondents; c) community relations; d) survey management issues; e) technical malfunctions; and f) other risks in the survey context</li> </ul> <p><b>Supervisors</b></p> <ul style="list-style-type: none"> <li>– Monitor conduct of field survey teams</li> </ul> <p><b>Enumerators</b></p> <ul style="list-style-type: none"> <li>– Respond according to guidelines</li> <li>– Report events and actions to supervisors and/or managers</li> </ul>
<b>Respondent distress</b>	<p><b>Illustrative good practice for responding to distressed respondents</b></p> <ul style="list-style-type: none"> <li>– Stop, break, offer the option of continuing or ending the survey, and remind respondents of their right to withdraw</li> <li>– Counselling support or referral for follow-up</li> <li>– Notify supervisor or survey manager</li> </ul>



<b>Summary of child protection obligations</b>	<ul style="list-style-type: none"> <li>- The core principle of child protection is to protect children from exploitation and abuse of all kinds in the administration and conduct of the survey</li> <li>- Survey managers are responsible for determining obligations and holding team members to account</li> <li>- Survey team members are responsible for their own conduct according to the guidance provided by team managers</li> <li>- Guiding principles include zero tolerance of child exploitation and abuse, best interest of the child, sharing responsibility for child protection, a risk management approach, and procedural fairness</li> </ul>
<b>Specific guidance on interviewing children</b>	<ul style="list-style-type: none"> <li>- Anyone under 18 would normally be considered a minor (child) for the purposes of this section</li> </ul> <p><b>General guidance (may change according to local guidance and law). WHO recommends rATA implementers take the most conservative position if multiple interpretations or options exist.</b></p> <ul style="list-style-type: none"> <li>- Children under 14 should never be interviewed without an adult household member present</li> <li>- Children under 8 should be interviewed with parents, carers or other adult household members as proxies/helpers</li> <li>- Children aged 15 and above can often be interviewed as adults. Local rules and norms will be included in survey deployment plans and will be clear in enumerator training for your national survey</li> </ul>

# Annexes

## Annex A - Potential rATA adaptations for unique deployment situations

The rATA is intended to capture a minimum dataset on population needs for AT in the simplest way. However, many stakeholders are likely to amend it for their own purposes. Even if the rATA is used in its original form, there are several areas rATA users should consider for adaptation to suit the local context and survey aims.

Tables A1 and A2 outline some possible adaptations to the survey structure and syntax for digital surveys. Please note these adaptations are not relevant for the global survey.

**Table A1: Potential rATA adaptations to consider before specific deployment**

Area	Potential adaptations
<b>A. Administrative information</b>	<ul style="list-style-type: none"> <li>Adapting the existing fields and options to suit the local scenario as relevant</li> <li>Household information, including number of residents, number of available residents for survey (to compute response rate and as a variable of interest)</li> <li>Pre-populate survey site information to match sampled areas or known survey locations</li> <li>Consider constraining survey locations to specific enumerators or enumerator teams</li> <li>Consider geospatial information (GPS coordinates) for analysis and survey verification</li> <li>Integrate informed consent requirements into questions for enumerators to read and verify. Consider integrating written consent using digital signature features of some survey software, or paper-based methods. Incorporate different consent processes for various age groups according to local requirements and your obligations</li> </ul>
<b>B. Demographic information</b>	<ul style="list-style-type: none"> <li>Expand demographic information to include further information on economics, education levels, family size</li> <li>Consider alternative ways to capture age information: date of birth, age in years, age ranges, depending on local norms</li> <li>Change sex/gender choices to suit local norms and expectations</li> <li>Consider using geographic information, either directly or linked to known economic data, as a demographic variable</li> </ul>
<b>C. Needs</b>	<ul style="list-style-type: none"> <li>Modify list of products to reflect the local situation if necessary and consider local images for the flashcards</li> <li>Child, adolescent and adult sub-modules to account for different ethical requirements, functioning questions, etc</li> </ul>
<b>D. Demand and supply</b>	<ul style="list-style-type: none"> <li>Consider asking for all products even if more than 3 are mentioned, or</li> <li>Adapt sources of assistive products to match context</li> <li>Constrain products to match functional difficulties (products not expected based on functional difficulty domain can be determined using an "other" option)</li> <li>Consider recording an estimate of out-of-pocket costs for consumers</li> <li>Adapt to the requirements of potential funding sources</li> <li>Modify / expand list of possible barriers to assistive product access</li> </ul>
<b>E. Satisfaction</b>	<ul style="list-style-type: none"> <li>E.1-6. Consider reducing survey complexity and length by determining overall satisfaction rather than for specific products</li> <li>Constrain questions based on previous answers; i.e. E.2 and E.3. Ask whether service was ever required or add "NA" option</li> </ul>
<b>F. Recommendations</b>	<ul style="list-style-type: none"> <li>Consider limiting recommendations to a sub-population, e.g. adults who have any need (met or unmet) for AT</li> </ul>

**Table A2: Further rATA adaptations**

<b>Constraints and verifications</b>	<ul style="list-style-type: none"> <li>– Use digital survey software to constrain responses, i.e. age ranges, pairing of functional domain and product</li> <li>– Restrict choices to relevant products based on previous responses</li> <li>– Restrict “none” or “NA” choice options as appropriate</li> </ul>
<b>Pre-calculations</b>	<ul style="list-style-type: none"> <li>– Using survey software, consider pre-calculating some variables, especially for use during data integrity checks</li> </ul>
<b>Follow up</b>	<ul style="list-style-type: none"> <li>– Depending on design, local requirements, ethical issues, present instructions for providing information about local services or follow up based on criteria from sections A and B.</li> </ul>

## Annex B - Considerations in cognitive testing

If your rATA involves adaptations to the questions, options or overall structure, it may be necessary to ensure the questions are consistently understood as intended by respondents. It is probably not necessary to test the entire survey. Instead, you might focus on any questions that are adapted. Small changes can have large impacts on the way questions are understood, and the meaning and comparability of data.

Cognitive testing is a method of pre-testing the tool to identify questions that may need rephrasing because they are not understood, sensitive to answer, difficult to recall, or the response options are not clear. Common problems encountered by respondents in answering survey questions are:

### Comprehension

If the respondent does not understand the question or response options as intended by the survey designers, drawing accurate conclusions from the respondent’s answers will be difficult or impossible. It is also possible that the same question is understood differently by various respondents, so in effect each respondent would be providing answers to different questions.

### Recall

Survey design assumes respondents have enough information to respond to the questions. However, sometimes people find it difficult to remember information, have complex recollections that make it difficult to answer a closed question, or might not know what might be considered an AT assistive product. In the rATA, using pictures and product descriptions of a list of likely products can assist with improving recall.

## Judgement

How survey questions are phrased can have an impact on how a respondent judges, or assesses, the question and then their choice of response. For example, a respondent may provide a “socially acceptable” answer if they judge that answering the question more precisely may single them out.

## Response options

If the available response options provided are not clear or are incomplete, respondents may feel compelled to make a choice that does not accurately reflect their view or position. Responses and accuracy can be influenced by a requirement to make answers fit pre-determined categories. The rATA includes the opportunity to answer “other” for most questions.

## Who should be involved in cognitive testing?

Cognitive testing is conducted with individuals that are not part of the target population or sample. Individuals for cognitive testing can be selected for the purpose and should share enough similarities with the survey’s target respondents to ensure relevance in the process. There is no hard and fast rule on how many people should be included in cognitive testing and the process is considered complete when no new information is forthcoming (saturation) or is limited by resource availability.

A range of people should be included in cognitive testing. Local partners, disabled people’s organizations and other user groups and community representatives may assist in identifying individuals to include in cognitive testing. The group of people involved in cognitive testing should include:

- Different genders and ages
- Different functional difficulties (or impairments)
- People who use different types of AT
- Different educational attainment levels
- People who do different types of work and are from varied socioeconomic backgrounds
- People living in rural, peri-urban and urban areas.
- People with different levels of knowledge about AT, including both people with little or no expertise, and AT experts.

## Overview of cognitive testing steps.

Cognitive testing involves examining each rATA question, and related response options in turn and asking questions to probe and assess the respondent’s understanding (see Table B1). The aim is to identify poorly phrased or unclear questions and response options.

**Table B1: Cognitive testing steps**

Step	What to do
<b>1. Purpose of testing</b>	<ul style="list-style-type: none"> <li>– Explain the purpose of the testing and what is expected from the participants</li> </ul>
<b>2. Record participant characteristics</b>	<ul style="list-style-type: none"> <li>– A record of the demographic characteristics of the cognitive testing participants is important</li> </ul>
<b>3. Test each question</b>	<ul style="list-style-type: none"> <li>– Proceed by section and examine each question in turn</li> <li>– Ask the suggested questions above to explore how the participant understands each question and response option. Ensure all questions are addressed</li> <li>– If a respondent clearly does not understand a question, move to the next. If at any time a respondent feels uncomfortable or distressed, pause or stop the interview</li> </ul>
<b>4. Record responses</b>	<ul style="list-style-type: none"> <li>– The enumerator records the responses provided for each question and response option for each section</li> <li>– The enumerator should make notes, explaining the answers</li> <li>– If the participant agrees, interviews can be recorded to assist in analysis</li> </ul>
<b>5. Reflect</b>	<ul style="list-style-type: none"> <li>– When all questions and response options have been examined, the enumerator should ask the respondent for any general comments or inputs on the overall tool</li> </ul>

