

Liberator's Tips for Mid-Cost Assistive Technology (AT) Applications

These suggestions are based on feedback from clinicians and have not been provided by the NDIA. When applying for funding, please refer to the NDIS website for the most up to date information. It may also be advisable to contact the AAC communicator's NDIS representatives to check what documentation they recommend.

When applying for mid-cost assistive technology (AT), the NDIS will require documentation clearly outlining why the device (hardware) and language system (software) is needed by the participant and justification regarding why alternatives are not suitable.

Know your audience

- The person reading the AT application may not be a speech pathologist or allied health professional. Your writing should be **aimed at someone who does not have allied health knowledge**.
- Avoid using jargon, acronyms, or abbreviations. If they are being used be sure to specify them.
- Where possible, **give specific examples of successes or challenges** that demonstrate the AAC communicator's strengths and needs, giving the reader a clear picture of why the prescribed AT is reasonable and necessary.
- It is important to remember that the NDIS is an insurance model funding scheme so different language and terminology is required. This means that you may need to deviate from a strengths-based approach and focus on the impacts of disability including activity limitations and participation restrictions. Please ensure you prepare the AAC communicator and their support network for this.

Be evidence-based

- **Refer to specific data collected during the trial**. If you used the Data Logging feature on the trial device, you can upload and analyse the data through Realize Language. Reports from Realize Language can be included as appendices to the AT application. Visit our website for more information on the [Realize Language tool](#).
- Make sure you **trial the device across environments**. Consider environments in which the AAC communicator is limited in their participation due to communication barriers. Specify these environments and note progress observed in each.
- Refer to research or articles throughout that support the request for proposed AT. A useful document for this is the [AT References for SGDs and Communication](#).

Use NDIS terms

- Describe the AAC communicator's permanent impairment(s) and need for AT in relation to limitations to their participation in activities. Note the consequent **impact on the AAC communicator's engagement in daily, community and where appropriate, economic life**. Note the impact on the AAC communicator's participation if they are unable to access appropriate AT.

Be familiar with the Reasonable and Necessary Supports (Section 34 of the NDIS Act 2013)

- For a request to be approved by the NDIS it must meet all of the criteria outlined in the [National Disability Insurance Scheme Act 2013, Section 34](#).
- Refer to the Reasonable and Necessary supports throughout the AT application and use the terms outlined, e.g., “represents value for money”, “supports social/economic participation”, “increases independence”, “support is effective and aligned with current good practice”.

Be familiar with the AT risk levels & the AT and Consumables Code

- Know what level of risk the AT being requested fits under. This will assist in determining the evidence that advisor characteristics and type of assessment required (see [Assistive technology product risk table](#)).
- Know what support item is being requested and refer specifically to it, e.g., dynamic display dialogue unit, eye gaze system, keyguard (see below).

Support Item in AT and Consumables Code Guide	Support Item Ref No.	Description in AT and Consumables Code Guide	Example
Software and Related Items to Add Advanced Communication Functionality to Computer/ Tablet/ Smartphone	05_222102111_0124_1_2	Software to convert a tablet or computer device to a communication device.	Communication apps and systems, e.g., LAMP WFL, Unity, WordPower
Communication – Face to Face - Electronic	05_221315811_0124_1_2	Electronic communication device with customisable and changing screens which allows a highly customised voice output generation and may include multiple input methods (Speech Generating Devices/Visual Technology/ Communication Devices).	Accent 800/1000/1400 Liberator Rugged 8/10 NovaChat 8/10
Complex Electronic Access Method Using Eye or EMG/neural Control.	05_241327891_0124_1_2	Hardware and software that directs or selects inputs by visual gaze or neural/neuromuscular action to activate a computer or face to face communication device.	Accent 1000 with Look Accent 1400 with Look 2 Accent 1000/1400 with NuPoint
Communication and Information – Computer interfaces	05_221300111_0103_1_2	Includes keyboards, trackballs, text to speech and other peripherals and tools (Reading/Writing/Input/Output Items).	Keyguard Touchguide

Source: Assistive Technology, Home Modifications and Consumables Code Guide 2022-23 (PDF 1MB), accessed through the NDIS website <https://www.ndis.gov.au/providers/pricing-arrangements/pricing-arrangements-archive>.

What to include in the AT letter/report

Background

Refer to the Participation Model/International Classification of Functioning, Disability, and Health (ICF) within this section. Discuss the following:

- Diagnosis and any coexisting conditions
- Relevant medical history
- Living situation and family/social supports
- Disability, particularly relating to the AAC communicator's ability to communicate and the impact this has on their participation in activities expected for their age
- Person-centred information including daily activities, recreational activities, interests, etc.
- Day-to-day activities and the environments these are in, e.g., preschool, school, day services, employment, local events, community access
- Specific levels of support required to complete tasks (include examples)
- Upcoming life transitions (transition to/from school, to supported living arrangement)

Functional Assessment

Specify functional limitations related to the AAC communicator's disability, and summaries of relevant assessments.

- Physical
 - Consider how the AAC communicator will access AT commenting on their **fine motor skills** (which could impact the size of screen, grid size, the need for a keyguard/touchguide or other alternative access), and **gross motor skills** (which could impact positioning, ability to carry device, the need for mounting systems).
 - List any current or future **non-communication AT**, e.g., mobility aids, seating requirements, self-care equipment. Listing these will assist in building a picture of the AAC communicator's physical needs.
- Sensory
 - Discuss the AAC communicator's **vision and hearing** and comment on whether these may impact on device features including screen size, volume, positioning, auditory prompts, high-contrast symbols, etc.
 - Discuss the AAC communicator's **sensory presentation** and how this impacts their communication.
- Communication
 - Refer to speech pathology assessment findings which could include observations and formal assessments regarding **receptive & expressive language, pragmatics, and speech**.
 - Refer to **specific assessment tools** used to assess the AAC communicator's skills and choose appropriate AT. For example, IPPA, SETT, AAC Profile, Likert Rating Scales, Pragmatics Profile, etc. For more information about these assessments visit the Liberator website <https://liberator.net.au/support/education/aac/assessment-evaluation>
 - Focus on **FUNCTION**. How does your client communicate day to day? What are the barriers? Are they limited in the pragmatic functions they can express?

- Outline what **communicative functions the AAC communicator can and cannot meaningfully communicate and how the AAC communicator is currently expressing them**. Make note of any that are non-symbolic or cannot be recognised by people easily. Include examples, e.g., *when XX wants help, she throws/hits item, screams, hits self/others...*
- Detail any missed opportunities that are available for neurotypical peers/that are available for people who can self-regulate/that are available for individuals who do not have additional physical needs. Help the reader see the **impact of your participant’s communication difficulties on their independence and participation** in their community.
- Include examples of communication skills in **more than just one environmental setting**.
- Provide examples of how **unintelligibility** impacts the individual’s function and participation across different environments.
- Cognitive
 - Refer to any **diagnoses and resulting categorisation** such as mild, moderate, severe, or profound. You can also include important information from assessments/reports completed by other professionals.
 - Discuss **skills/difficulties in areas which will impact the choice of vocabulary system** for the AAC communicator, e.g., attention, working memory, literacy, symbol recognition, and categorisation.
 - Consider any **behaviours of concern** that are related to communication breakdown.
 - Provide the antecedent (trigger), resulting behaviour and perceived or actual consequences to the AAC communicator and those around them physically, emotionally, and socially.

Previous/Current AAC

- Consider:
 - **Unaided approaches**, e.g., Key Word Sign.
 - **Low-tech supports**, e.g., PODD books, Picture Exchange Communication System (PECS), Aided Language Displays (ALDs), picture schedules.
 - **High-tech supports**, e.g., single message switches, iPad, other devices (dedicated/non dedicated). Include the model, age, history of repair and ongoing suitability.
- Describe how these systems have or have not worked in the past, or **how they do or do not currently meet the needs of the AAC communicator**. Comment on the level of independence and support that the AAC communicator requires to use the current AT.
- If the AAC communicator does not have current AT, comment on how this impacts their skill development and achievement of goals.
- If the AAC communicator is using AT that is not aiding them in achieving their goals, comment on why, what the limitations are, the difficulties with current AT, and the justification for additional/alternative AT.
- If the AAC communicator is requesting a like-for-like replacement for current AT, include documentation provided from the supplier confirming that it is beyond repair/why it needs replacing, confirm existing use of the device and information to support no significant change in requiring the proposed AT.
- Highlight multi-model communication, and any AT or AAC that the AAC communicator will continue to require in conjunction with the device. Ensure you consider now and into the future.

Goals

- List relevant goals from the AAC communicator’s NDIS plan and for each goal, specify how AT will help the AAC communicator achieve that goal.
- List current speech pathology goals, remembering to ensure that goals are functional and focus on participation and independence.
- You may wish to use an assessment such as the [Individually Prioritised Problem Assessment \(IPPA\)](#) to support this and the [Goal Attainment Scale \(GAS\) Tracker](#) (discussed below) to comment on goal progress.

Device Trial of Recommended AT

Through your description of the trial, explain the evidence for the recommended option as the most appropriate solution which will facilitate achievement of the AAC communicator’s goals. Include the following:

- **Device and system** including any additional support items trialled, e.g., keyboard.
- **Location(s)** of the trial listing all environments in which the device was used, e.g., home, school, clinic room, playground, library, bowling, etc. Note where different communication partners were involved in different locations.
- **Duration** and dates of the trial.
- Clear **goals** for the AT trial and evidence of the AAC communicator’s progress in achieving them. We recommend using [Janice Light’s AAC Competencies](#) and the [Goal Attainment Scale \(GAS\) Tracker](#) to structure and report on goals. Include the tracker in this section or as an appendix and interpret the results. We recommend having approximately three goals for a trial and ensuring at least one of those goals is operational/strategic.
- Discussion of **communication competences**, for example:
 - Operational competence
 - *XX began to carry the device with them between rooms in their home.*
 - *XX used the CLEAR button and HOME button appropriately when hitting a button by mistake.*
 - Strategic competence
 - *XX began to look to the device to communicate. For example...*
 - *XX was observed to experience success using the device with both familiar and unfamiliar communication partners. For example...*
 - *XX navigated LAMP WFL to locate frequently used vocabulary including food items, and motivating activities including games.*
 - Social/functional/linguistic competence
 - *XX answered yes/no questions with the device.*
 - *XX directed communication partners with the device (“come”) rather than pulling or hitting them.*
 - *XX made choices when presented with a desired and undesired option.*
 - *XX requested items (“want”) with the device.*
 - *XX used some descriptors, e.g., “hot”.*
- Discussion of **functional outcomes** which may include the use of the [IPPA \(Individually Prioritised Problem Assessment\)](#) to indicate how the recommended AT made a positive difference, as well as discussion of:
 - How goals and outcomes link back to the AAC communicator’s NDIS goals.

- The functional impact the device had on the AAC communicator’s participation in daily activities and interests, and how it will support participation in school/ home/ day programs/ community. Discuss observations with AT compared to without AT.
- The functional impact the device had on the AAC communicator’s independence, giving clear examples of activities or interactions that were previously difficult for the AAC communicator to engage in and how the AT allowed them to increase their independence in these interactions during the trial.
- Environments, times of day and activities that the device will be used in. For most AAC communicators, this would be continuously throughout the day as it is their method of communication, e.g. *The device will be used across environments throughout the day as it is the individual’s voice.*
- Justification from various forms of data collected across environments, and with different communication partners, e.g., trial diary, GAS goal tracker, rating scales, self-rating forms, tables/graphs/figures from Realize Language with Data Logging, etc.
- Discussion of the **AAC Communicator’s response to the device and system**, including:
 - The AAC communicator’s own assessment about the effectiveness of the recommended AT (where possible).
 - The AAC communicator’s engagement and motivation to use the trialed system.
 - Any features of the device and system that helped the AAC communicator to use it, e.g. *The Vocabulary Builder option was active when XX was using the device. This helped XX to learn the sequences for words more efficiently.*
 - Any changes in behaviour, particularly if part of the AAC communicator’s profile includes challenging behaviours relating to communication difficulties.
 - If there was a decrease in support required from communication partners for the AAC communicator to engage in particular activities.
- The **support required** during the trial. For example, the level of prompting required by communication partners, giving focus to the changes in support required by the speech pathologist/ parent/ support worker for the AAC communicator to engage in tasks and activities.
- Identification of any **barriers** that affected the trial outcomes, e.g., client illness, technical difficulties, school disruption.

Evaluation of Alternative AT Options

- If you trialed additional options, use the same guidelines above to demonstrate trial goals (GAS goals, AAC competencies), functional outcomes, and AAC communicator’s response (engagement, motivation, etc).
- It is recommended that you use the same goals when trialling different options.
- Remember to identify the features required for your AAC communicator and whether these are present in the considered/trialed options. For example, *‘the Unity vocabulary was identified as a recommended AT feature. This vocabulary is not available on an iPad therefore this hardware was considered but not trialed.’*, *“durability was identified as a key feature required for the recommended AT solution”*.
- It is recommended that you complete the [SETT Tool Selection Framework \(joyzabala.com\)](https://www.joyzabala.com) and include it in your AT application. The SETT tool gives you a way to succinctly feature match all options considered (see next page).

Include the recommended AT device/system and multiple other devices/systems (e.g., Liberator Rugged, iPad, Accent, NovaChat, LAMP WFL, Unity, WordPower, Proloquo2go, etc.) trialled and/or considered.

Descriptors/AT Features Required									
Tools									
(RECOMMENDED) Hardware:	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe
Vocabulary:									
Cost:									
Hardware:	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe
Vocabulary:									
Cost:									
Hardware:	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe
Vocabulary:									
Cost:									
Hardware:	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe
Vocabulary:									
Cost:									
Hardware:	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe	YES / NO Describe
Vocabulary:									
Cost:									

List features most important to the AAC communicator in the top row.

Provide cost with additional accessories including protective case, bag, carry strap, software, technical assistance/care, additional amplification, repairs, postage, etc.

Give clear examples in your descriptions as to why the feature is or is not part of that device and system.

- Here is a list of features that you might consider.
 - Hardware
 - Battery life
 - Durability
 - Portability
 - Speakers
 - Dedicated or non-dedicated
 - Warranty
 - Environmental control options
 - Computer access & social media integration
 - Software
 - Language representation (alphabet based, single meaning picture system, semantic compaction)
 - Vocabulary file (LAMP WFL Full, Unity 144, CoreScanner)
 - Navigation (motor planning, category/page based, sequenced)
 - Number of cells/grid size
 - Access
 - Direct or indirect
 - Specify method of access if indirect
- When discussing cheaper alternatives to your recommendations, clearly demonstrate if they are not appropriate or recommended. Your descriptions in the SETT tool can be used here to highlight those cheaper options (e.g., iPad), that do not meet the features required for the AAC communicator, e.g.,
 - *XX has strong association with his iPad as a device for down-time (watching YouTube). When presented with the iPad locked with Guided Access to WordPower, he responded by throwing the device and becoming increasingly upset.*
 - *XX is unable to communicate when watching YouTube as her vocabulary is on the same device.*
- If the AAC communicator has broken several tablets/electronic devices you should highlight this noting the need for a sturdier device. Reference Liberator’s 3-year parts and labour warranty and compare with options for repairs for other trialled/considered but not recommended AT.

AT recommendation

Provide a clear description of the AT that is needed along with a quote. You can generate a quote directly from the Liberator website, www.liberator.net.au/products/get-a-quote. Include any accessories required, (e.g., keyguard, screen protector, carry strap, bag, etc).

Evidence

- Support for the requested technology should be strong. Consider existing research (refer to the [AT References for Speech Generating Devices and Communication.docx.pdf](#)), your professional experience, and the AAC communicator's experience along with their support network.
- Refer to research for people with severe communication impairment and the requirement for AAC. Consult the Speech Pathology Australia position statement on AAC.
- Search for disability specific research for your participant, (e.g., AAC and ASD), and include relevant information on how AAC has been found to support that population.

Long-term benefits

- Note [how the proposed AT will reduce the level of support required for daily activities](#). Be clear about these changes in terms of the impacts on the AAC communicator's independence, any behavioural changes/increased enjoyment observed during the trial, feedback from communication partner's and support staff. Draw a clear picture if the AT is likely to reduce informal support needs.
- Comment on the [improvements in function](#) such as communication, independent living skills, cognition, socialising, accessing the community, making friends, wellbeing, decreasing behaviours of concern, reducing carer stress.
- Comment on the [future reduction in speech therapy](#) due to the increase in communication skills.
- Comment on the [future reduction in behaviour support](#) due to reduced communication frustration.
- Outline the AAC communicator's [current life stage and any upcoming changes](#) such as starting school, finishing school, beginning a work placement.
- Note that you have ensured to apply for a system with a [robust vocabulary with room for growth for support across the AAC communicator's lifespan](#) as their needs and skills change. Include examples.
- Consider any [foreseeable changes](#) to the AAC communicator's functional status such as development or deterioration of motor skills or sensory processes. Comment on these where necessary to discuss the need for AT which will allow alternate access methods now or in the future.
- The anticipated [lifespan of a device is around 3 years](#) due to the inordinate wear & tear exerted on AAC devices by users. You may wish to comment on some of the factors below where relevant to the AAC communicator. If the AAC communicator is a particularly 'hard user', comment on this, e.g.:
 - Is the device subjected to massive, repetitive impact hits when an individual with cerebral palsy accesses the touchscreen through spasmodic movements?
 - Does the user have limited expressive language resulting in increased frustration and physical violence (including throwing the device or smashing against a hard surface, or dropping)? *It is worth noting that this may likely decrease because of having the device.*
 - Is the device well-looked after by the user's family? Is it kept clean with batteries charged regularly as recommended (not allowed to decay over time, a minimal charge is always maintained, a deep charge is routinely applied)?

- Is the device used by different users or across different environments like schools & respite houses as well as the home? (entailing many different supporters handling & charging the device)?
- Is Windows shutdown regularly overnight & updates always applied? (if applicable)?

Risk assessment

- Discuss potential risks if the AT is not funded. Consider [independence, participation, social isolation, behaviours of concern, quality of life, future costs if communication regression occurs, and that communication is a basic human right](#). For example, *“without access to appropriate AT, XX demonstrates behaviours including ... resulting in injuries to himself, etc and/or without access to appropriate AT, XX is unable to successfully communicate and express her wants and needs, instead relying on others to interpret communication and provide for her at all times.”*
- In discussion of behaviour linked to communication difficulties, you can use [research](#) in addition to providing examples of behaviour and frustration that the AAC communicator may demonstrate without access to a comprehensive AT solution.
- If the AAC communicator has a [Behaviour Support Plan](#), make sure to attach this as an appendix.
- Comment on options that you have deemed inappropriate as to their increased risk, e.g., increased risk of breakage, access to repairs, impacts of time without a device for the AAC communicator, etc.
- Explain that preventing someone from communicating is a restrictive practice.

Repairs and maintenance

- Provide an estimate of the repairs and maintenance costs per year. If recommending a Liberator device, state [Liberator’s 3-year repair and replacement warranty](#). Discuss value for money and highlight all that comes with purchasing a dedicated device.

Value for money

- Discuss the cost of the device and system in relation to the impact it will have on the AAC communicator’s life. If recommending a Liberator device, refer to the [Liberator Value for Money table.docx.pdf](#) and even include this in your AT application.

Implementation

- Provide a [likely cost of speech pathology support](#) needed to implement the use of the device. Outline where they will be using the AT once provided.
- If recommending a Liberator product, outline the [free training and phone/email support](#) that comes with purchase of the device.
- Discuss any [changes needed](#) to the AAC communicator’s environment, transport, or other AT.
- Comment on considerations if mounting of the proposed AT is required.

Compliance with relevant AT standards

- *All Liberator AAC devices comply with the requirements of the applicable ACMA Standards made under the Radiocommunications Act 1992 and the Telecommunications Act 1997. Liberator is a Responsible Supplier registered with the Australian Communications & Media Authority (ACMA) to affix the RCM (Regulatory Compliance Mark) to all its relevant products.*

Useful websites and resources

Liberator website

- Find a consultant <https://liberator.net.au/liberator/team-liberator>
- NDIS funding <https://liberator.net.au/support/funding/ndis>
- Generate a quote <https://liberator.net.au/products/get-a-quote>
- Events <https://liberator.net.au/training/events>
- Training <https://liberator.net.au/training/device-training>
- Resources <https://liberator.net.au/support/resources>

NDIS website

- NDIS Operational Guidelines: <https://www.ndis.gov.au/about-us/operational-guidelines>
- NDIS Act 2013, section 34 regarding Reasonable and Necessary Supports http://www6.austlii.edu.au/cgi-bin/viewdoc/au/legis/cth/consol_act/ndisa2013341/s34.html
- Reasonable and Necessary Supports document -[Internal PREVIEW until 12 April- Reasonable and Necessary Supports.pdf](#)
- Reasonable and Necessary Supports - Is the support something we would expect your informal supports to provide? <https://ourguidelines.ndis.gov.au/how-ndis-supports-work-menu/reasonable-and-necessary-supports/how-we-work-out-if-support-meets-funding-criteria/does-support-meet-reasonable-and-necessary-criteria/support-something-we-would-expect-your-informal-supports-provide>
- Assistive Technology (AT) Operational Guidelines (OG) <https://ourguidelines.ndis.gov.au/supports-you-can-access-menu/equipment-and-technology/assistive-technology>
- AT Operational Guidelines document [OG Assistive Technology 20231220.docx](#)

Other websites

- Summer Foundation: ‘Getting the language right’ – guide to writing reports for the NDIS <https://www.summerfoundation.org.au/wp-content/uploads/2018/04/getting-the-language-right-web.pdf>
- Valid: ‘10 Steps to Excellent NDIS Therapy Reports’ – guide to writing reports for the NDIS: <https://www.valid.org.au/sites/default/files/10-steps-to-excellent-National-Disability-Insurance-Scheme-NDIS-therapy-reports-v1.pdf>

References

- Light, J., & McNaughton, D. (2014). *Communicative competence for individuals who require augmentative and alternative communication: A new definition for a new era of communication?*. *Augmentative and Alternative Communication*, 30(1), 1-18.