



Every customer counts

Accessibility Principles for Banking Services



Australian Banking
Association

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*“Accessibility to banking is a
fundamental human right.”*

Anna Bligh AC
CEO, Australian Banking Association

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1. INTRODUCTION

1.1 Banking and financial accessibility

Banking, financial products and services are an essential part of life. Advances in technology have increased the efficiency and convenience of banking but have also increased the need for banks and other financial service providers to rapidly adapt to make sure all their customers, including those with disability, can access and conduct their banking safely and securely.

The increasing use of diverse types of Payments means it is vital that banks work together to promote accessibility for all customers, which includes individuals, organisations, entities, companies and institutions.

According to The Australian Bureau of Statistics, people with disability make up nearly 20 per cent of the Australian population. All of us will face disability access challenges at some stage of our lives. For example, you may have permanent disability as a person with one arm, temporary disability with a broken arm in a sling, or situational disability through holding a baby in one arm. In each of these cases, accessible banking that is inclusive by design would ensure better customer service.

The principles within this document ensure banking services in Australia are optimally placed to deliver the best accessibility and inclusive experience for their users. Employing an inclusive design methodology for the development of products and services is critical to this outcome. These three dimensions to inclusive design encompass the Principles below to ensure universal access:

- 1) Recognise diversity and uniqueness: people with different abilities will provide insights far beyond a perceived 'average' and mass-produced solution. Focuses on the premise of 'one size fits one' and providing multiple ways of access and use.
- 2) Inclusive process and tools: includes people from diverse groups, with diverse needs and perspectives, into product and service design in a meaningful way, acting on the edict, 'nothing about us without us' in the form of co-production.
- 3) Broader beneficial impact: takes into consideration the context and environment and seeks solutions that benefit everyone through flexibility, adaption and personalisation.

Inclusive design for everyone leads to better outcomes for all users, not just people with disability.

1.2 Our commitment

The banking industry is committed to ensuring the accessibility of all banking products and services for all people, including people with disability. The new *Banking Code of Practice* (Part 4: Inclusive and Accessible Banking) sets out our commitment to provide banking services which are inclusive of all people.

As part of this commitment, the banking industry has developed a set of principles, the *Accessibility Principles for Banking Services* (Principles), to continue to improve accessibility for customers and to promote best practice across the industry. The Principles may be used in the creation of accessible products and services and included in a bank's *Disability Action Plan* as part of its commitment to improve accessibility and inclusion for its customers and demonstrate leadership across the industry.

1.3 The legal framework for accessibility

Internationally, Australia is a signatory to the *UN Convention on the Rights of Persons with Disabilities*.

Under Australian law, the *Commonwealth Disability Discrimination Act 1992* (DDA) makes it unlawful to discriminate against a person on the grounds of disability. The objects of the DDA include eliminating, as far as possible, discrimination against people with disability, and promoting recognition and acceptance within the community that people with disability have the same fundamental rights as the rest of the community.

The DDA uses a broad definition of disability that includes:

- Physical
- Intellectual
- Psychiatric
- Sensory
- Neurological
- Learning difficulties
- Physical disfigurement
- The presence in the body of disease-causing organisms

Along with the Commonwealth DDA, there is equivalent state legislation in eight Australian jurisdictions. Other Acts and legal instruments covering accessibility include:

- *National Disability Insurance Scheme Act 2013 (Cth)*
- *Disability (Access to Premises – Buildings) Standards 2010 (Cth)*
- *National Disability Strategy 2010-2020*

The Human Rights Commission supports efforts to increase accessibility, as do the Disability Action Plans of the banks.

1.4 Force of document

These Principles do not have the force of law and adopting the Principles does not guarantee fulfilment of legal responsibilities under the *Disability Discrimination Act 1992* (Cth), nor does it remove from any institution their obligation to comply with the requirements of that Act or any other relevant legislation. Adoption of the Principles is voluntary but strongly encouraged.

The Principles have been developed in consultation with interested parties with the objective of describing best practice in accessibility and inclusive design. As a result, an organisation adopting the Principles and applying them to their products and services may have confidence that their implementation will carry some weight as a defence against a complaint lodged under the DDA.

Institutions should also refer to any relevant Australian Standards (refer Appendix).

1.5 Principles-based approach

The Principles are high-level principles rather than technical standards. This reflects a general trend in standard-making away from prescriptive standards. Change is rapid and prescriptive standards may become outdated quickly. They also reduce the flexibility banks need to adapt to new technologies, devices and opportunities.

The Principles establish best practice in accessibility. In order for banks to provide equitable access for as many customers as possible, they will be following these Principles throughout their organisations.

“There are many industries in Australia that aren’t delivering as effectively as the banking industry does. These principles will assist in further improvement.”

Dr Graeme Innes – Disability Advocate

1.6 Universal Design Principles

Most of the substantive efforts to improve accessibility (including [Web Content Accessibility Guidelines](#) detailed below) draw upon the [7 Principles of Universal Design](#), which were developed in 1997 by a team at North Carolina State University.

Banks recognise these Universal Design Principles as a foundation for the Principles and commit to observing them in their strategy and approach to accessibility. The principles are included here as a resource to aid design of products to improve accessibility.





THE 7 PRINCIPLES OF UNIVERSAL DESIGN

Principle 1: Equitable Use

The design is useful and marketable to people with diverse abilities

- 1a) Provide the same means of use for all users: identical whenever possible; equivalent when not
- 1b) Avoid segregating or stigmatising any users
- 1c) Provisions for privacy, security, and safety should be equally available to all users
- 1d) Make the design appealing to all users.

Principle 2: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities

- 2a) Provide choice in methods of use
- 2b) Accommodate right- or left-handed access and use
- 2c) Facilitate the user's accuracy and precision
- 2d) Provide adaptability to the user's pace.

Principle 3: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level

- 3a) Eliminate unnecessary complexity
- 3b) Be consistent with user expectations and intuition
- 3c) Accommodate a wide range of literacy and language skills
- 3d) Arrange information consistent with its importance
- 3e) Provide effective prompting and feedback during and after task completion.

Principle 4: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities

- 4a) Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information
- 4b) Provide adequate contrast between essential information and its surroundings

- 4c) Maximise 'legibility' of essential information
- 4d) Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions)
- 4e) Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

Principle 5: Tolerance for Error

The design minimises hazards and the adverse consequences of accidental or unintended actions

- 5a) Arrange elements to minimise hazards and errors: most used elements, most accessible, hazardous elements eliminated, isolated, or shielded
- 5b) Provide warnings of hazards and errors
- 5c) Provide fail-safe features
- 5d) Discourage unconscious action in tasks that require vigilance.

Principle 6: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue

- 6a) Allow user to maintain a neutral body position
- 6b) Use reasonable operating forces
- 6c) Minimise repetitive actions
- 6d) Minimise sustained physical effort.

Principle 7: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility

- 7a) Provide a clear line of sight to important elements for any seated or standing user
- 7b) Make reach to all components comfortable for any seated or standing user
- 7c) Accommodate variations in hand and grip size
- 7d) Provide adequate space for the use of assistive devices or personal assistance.



1.7 WCAG Principles

The World Wide Web Consortium (**W3C**) has developed standards for web accessibility which are adapted from the Universal Design Principles. The Accessibility Guidelines Working Group guidelines are currently WCAG 2.0. They have four main principles, 12 guidelines and three conformance levels; A, AA, and AAA, as well as *success criteria* against which a product can be assessed. The Australian Government has accepted WCAG 2.0 AA as their technical standard for websites, and it is recommended for all organisations by the Australian Human Rights Commission. The ABA and banks recognise the WCAG Principles as a foundation for the Principles and will use these to inform accessible website design.

In terms of a succinct expression of principles for accessibility, WCAG 2.0 AA is currently best practice for websites and is the chosen standard for banks wanting to provide digital accessibility. *WCAG2ICT* (Guidance on Applying WCAG 2.0 to non-Web Information and Communication Technologies) is more relevant to native mobile apps.

Perceivable

Web content is made available to the senses – sight, hearing and/or touch

- **Provide text alternatives for non-text content**
Example: if you can't see a graphic or chart, alt text will enable a screen reader to convey its information
- **Provide alternatives for time-based media**
Example: if you can't hear, captions and transcripts will assist; if you can't see, audio will assist
- **Create content that can be presented in different ways (for example simpler layout) without losing information or structure**
Example: if content is available to assistive technologies, anyone can access it
- **Make it easier for users to see and hear content including separating foreground from background**
Example: use enough contrast to make it easy to see in all environments, avoid using colour to provide meaning or layering sound that may fight with audio screen readers output.

Operable

Interface forms, controls and navigation are operable

- **Make all functionality available from a keyboard**
Example: if you have limited motor control, a pointing device may not work for you
- **Provide users enough time to read and use content**
Example: time dependent functions limit accessibility for users with low vision, and with dexterity or cognitive limitations
- **Do not design content in a way that is known to cause seizures**
Example: strobing, blinking, flashing or flickering can cause seizures
- **Provide ways to help users navigate, find content and determine where they are**
Example: users with cognitive impairments value consistent navigation; users with reduced dexterity value large buttons and links that can be selected easily.

Understandable

Content and interface are understandable

- **Make text content readable and understandable**
Example: if you have vision impairments, you will value simple, clear language displayed in a non-serif typeface on a plain background
- **Make web pages appear and operate in predictable ways**
Example: screen readers may not read content that updates dynamically without a page refresh.
- **Help users avoid and correct mistakes**
Example: screen readers need clear labels and alerts to help users be aware of and navigate submission errors.

“There are still lots of areas that seemingly off limits because society hasn't yet caught up with the fact that we are more than capable”

Emma Bennison – CEO Blind Citizens Australia

Robust

Content can be used reliably by a wide variety of user agents, including assistive technologies

- **Maximise compatibility with current and future user agents, including assistive technologies**
Example: add descriptions and instructions for all accessibility features and follow conventions that allow assistive technologies to work

Following an extensive desktop audit of national and global banks in 2018, Barclays Bank was identified as having world's best practice accessibility. *Barclays* has adopted these four WCAG 2.0 *POUR principles* and 12 guidelines for their products and services.



2. ABA ACCESSIBILITY PRINCIPLES

The ABA has consulted widely with its member banks, peak disability organisations and technical advisors to produce these Principles.

2.1 Banking services in general

Banks providing best practice in accessibility in general will:

- 1) Follow an inclusive design process to ensure their products and services are accessible to all customers, business operators and bank employees
Example: multiple means of authentication
- 2) Provide information about the functionality of the service and its accessibility, including any product or service information provided to customers
 - a) The information content should be available in text formats and can be presented in different ways by the users, and via more than one sense
 - b) Alternatives to non-text content should be available
- 3) Make banking channels accessible, including when moving between channels, in a consistent way for users' perception, operation and understanding
 - a) Including the adaptability of content presentation and interaction
 - b) In a way that facilitates interoperability with a variety of assistive technologies
- 4) Use best endeavours to accommodate special circumstances or new accessibility challenges
Example: when a customer requires text and applications in accessible formats, has difficulties typing information into a web form or has difficulty using online-based calculators
- 5) Provide customer-facing staff with disability awareness training and digital service developers with accessible design training
- 6) Ensure that new technology meets accessible design guidelines and follows inclusive design principles. The Australian Government has adopted accessible procurement through AS EN 301 549. Banks will follow this practice.
- 7) Implement inclusive design processes and consult primarily with organisations of people with disability as well as experts in the disability sector, including user experience testing, when developing new products and services, to ensure their accessibility
- 8) Develop or follow existing communication standards for documents, SMS, email or other notification services that may be outside the channels of mobile, web or telephone banking
Example: the ISO standard for universal accessibility of PDF documents is PDF/UA
- 9) Installation of any devices should be compliant with the *National Construction Code*
- 10) Ensure that the withdrawal of a service does not result in inaccessibility of other services.

*“Accessibility is not about guidelines
it’s about people”*

Adem Cifcioglu – Accessibility Working Group

2.2 Websites used for banking services

Banks providing best practice in accessibility in websites will:

- 1) Make websites and web content accessible in a consistent way for users' perception, operation and understanding
 - a) Including the adaptability of content presentation and interaction
 - b) In a way that facilitates interoperability with a variety of user agents and assistive technologies
 - c) Ensure web content conforms to the Web Content Accessibility Guidelines (WCAG) 2.0 to a minimum of Level AA, in line with the recommendations from the Australian Human Rights Commission
 - d) As soon as practicable, implement changes to web content to conform to WCAG 2.1 guidelines
Example: accessibility reviews should include such web-based products as loan comparison tools, calculators, business banking sites and services.

2.3 Mobile device-based banking services

There is a consensus among those consulted during the process of drafting the Principles that the BBC currently has the best practice around mobile device accessibility. Because it is a single organisation as opposed to a global effort like W3C, its guidelines cannot be endorsed in the same way as WCAG guidelines. However, banks will find the *BBC's mobile accessibility guidelines* to be informative and useful. Also informative and worthy of study are Apple's *guidelines for accessibility on iOS* and Google's advice for *improving Android accessibility*.

WCAG 2.1 includes mobile considerations and should be adopted within a reasonable transition period after publication. *WCAG2ICT* (Guidance on Applying WCAG 2.0 to non-Web Information and Communication Technologies) is more relevant to native mobile apps.

Banks providing best practice in accessibility in mobile devices will:

- 1) Provide information about the functionality of the service and its accessibility
 - a) In text formats and via more than one sense
 - b) Alternatives to non-text content should be available
 - c) The electronic information, including online applications, should be provided with reference to point 2.
- 2) Make banking apps accessible in a consistent way for users' perception, operation and understanding
 - a) Including the adaptability of content presentation and interaction
 - b) In a way that facilitates interoperability with a variety of user agents and assistive technologies.
- 3) Assess innovation benefits to deliver the best outcome for customers
Example: prioritising software innovation over hardware changes.
- 4) Use native controls over custom controls wherever possible to achieve automatic accessibility.

- 5) Be aware that cross-platform app development tools can result in inaccessible apps.
- 6) Be aware that if mobile apps are based on single-page web app approaches they will need very careful design and testing throughout development phases.
Example: many JavaScript libraries do not support accessibility and ARIA coding is often more involved on mobile devices and operating systems.

2.4 Banking terminals, ATMs, EFTPOS and other devices

Banks recognise that devices like terminals, ATMs and EFTPOS are used by a wide network of users that reaches far beyond their own customers. As such, the accessible design and operation of these devices are crucial to achieving greater accessibility for people with disability. Banks also recognise that consistency and predictability of design provide benefits to people with disability, for example, keypads in similar places on devices and which contain a dot on the number 5 for identification.

Design and production

Banks providing best practice in accessibility in ATMs, EFTPOS and other devices, will:

- 1) Provide information on the use of the product itself (labelling, instructions, warning) which is
 - a) Available by more than one sense
 - b) Understandable
- 2) Ensure the user interface of the product, including handling, controls, feedback, input and output, meets the relevant Functionality Accessibility Requirements in AS EN 301 549
- 3) Ensure the product interfaces with as many assistive devices as possible
- 4) Ensure accessible design and testing of new technology occurs at all stages of product development so it can be released with reliable accessibility at the same time for all users
- 5) Ensure installation complies with the National Construction Code and its related standards.

User interface and functionality design

Banks providing best practice in accessibility in ATMs, EFTPOS and other devices, in relation to user interface and functionality design, will provide:

- 1) Devices that allow:
 - a) Alternative input mechanisms
Example: tactile keypads, haptic feedback or a touchscreen
 - b) Alternative forms of output
Example: audio feedback, haptic, refreshable Braille
 - c) Communication and orientation via more than one sense
 - d) Alternatives to speech for communication and orientation
 - e) Flexible magnification and contrast
 - f) An alternative colour to convey information
 - g) Flexible ways to separate and control foreground from background noise
Example: reduction of background noise in noisy public environments so devices can be reliably used by blind people
 - h) User control of volume
 - i) Sequential control and alternatives to fine motor control
 - j) Modes of operation for people with limited reach and strength
 - k) Avoidance of triggering photosensitive seizures
 - l) Enough lighting to enable operation of ATMs and safety of the user
 - m) Minimisation of glare on ATM screens
 - n) Equal security and privacy for all users.

2.5 Telephone banking services

This section refers to automated telephone services and does not extend to direct phone communication between a customer and bank employee. For any DTMF (touch-tone) automated phone services, banks must comply with AS/NZS 4263.

Banks providing best practice in accessibility of telephone services will:

- 1) Ensure the accessibility of products and services
- 2) Apply consistency in the terminology, design and function of the service
Example: avoid duplicating terms, like also calling the hash key the pound key
- 3) Minimise keystrokes
- 4) Provide an option to speak with an operator
- 5) Provide information about the functionality of the service and its accessibility
 - a) The information content should be available in text formats and via more than one sense
 - b) Alternatives to non-text content should be available
 - c) The electronic information, including the related online applications, will be provided in accordance with point 8)
- 6) Make allowances for the use of assistive or support services
Example: the National Relay Service, Telephone Interpretive Service (TIS) or Real Time Text technology
- 7) Provide users with the opportunity to recover from error without needing to re-enter correct information
- 8) Address the needs of people with disability in the functions, practices, policies, procedures and alterations in the operation of the service.

2.6 Voice-based, AI technology

Voice-driven digital assistants such as Apple Siri, Google Home and Amazon Alexa are current examples of voice-based AI interactions. Some banks are offering voice-activated banking services now, and the trend is forecast to grow rapidly. However, while voice-activation may be a boon for some people with disability, it may be problematic for others with speech, language and communication impairments.

“All of the banks are investing to make sure their products and services are flexible, they’re desirable and they’re convenient for every single member of the community”

Shayne Elliott – ABA Chairman

Banks providing best practice in accessibility in voice-based services will:

- 1) Ensure security and privacy measures cover all users
Example: allow for the use of headphones and/or blanking of screens when appropriate
- 2) Provide alternative methods of transaction
Example: entry of PIN via voice as well as keypad
- 3) Ensure equality of access to the service or its alternative
Example: an alternative human operated telephone service should be available for the same time periods as a voice-based service.

2.7 Authentication

Biometrics is an emerging element in authentication. Fingerprint, voice and facial recognition systems are now in use. As cardless systems using NFC protocols became more widespread, people may transact with banks using an expanding range of devices including rings, bands, bracelets, watches, phones, suit cuffs and other devices.

The *Guiding Principles for Accessible Authentication* (2007) remains a valuable document that deals in more detail with accessibility authentication issues than this set of Principles can.

Banks providing best practice in accessibility in biometrics will:

- 1) Ensure the accessibility of biometrics for people with disability
- 2) Provide alternative means of identification, authentication and transaction
- 3) Ensure security measures provide equal surety for all users.

3. REVIEW OF PRINCIPLES

The ABA will review the Principles for banking services every two years to ensure they remain relevant and meet the changing nature of banking.

The ABA will consider an out of cycle review where it receives significant feedback from members or other community stakeholders that the Principles require earlier review.

3.1 Review of a bank's adherence to the Principles

Banks demonstrating best practice in accessibility will be reviewed by an independent third-party every two years to assess the accessibility of their banking services. For example, by a review of their performance against their Disability Action Plans, or by the banks participating in external, industry recognised benchmarks such as the Access & Inclusion Index, led by the Australian Network on Disability.



APPENDIX – SOURCES

Australian sources

Below are some Australian Standards concerned with accessibility.

Accessibility requirements suitable for public procurement of ICT products and services

<https://infostore.saiglobal.com/en-au/Standards/AS-EN-301-549-2016-1892396/>

Document management applications - Electronic document file format enhancement for accessibility Use of ISO 32000-1 (PDF/UA-1)

<https://infostore.saiglobal.com/en-au/Standards/AS-ISO-14289-1-2017-1913453/>

Interactive voice response systems user interface - Speech recognition

<https://infostore.saiglobal.com/en-au/Standards/AS-5061-2008-996681/>

Interactive voice response systems – User-interface – Dual tone multi frequency (DTMF) signalling

<https://infostore.saiglobal.com/store/details.aspx?ProductID=379432>

Disability (Access to Premises – Buildings) Standards 2010 (Cth)

<https://www.legislation.gov.au/Details/F2010L00668>

National Construction Code NCC 2016 Complete Series (including Amendment 1)

<https://www.abcb.gov.au/ncc-online/NCC/2016-A1?vol=56a3b1a8-d528-471b-be8a-5527c2d7db47#56a3b1a8-d528-471b-be8a-5527c2d7db47>

Below are some Australian legislative instruments and principles.

Disability Discrimination Act 1992

<https://www.legislation.gov.au/Details/C2016C00763>

National Disability Insurance Scheme Act 2013 (Cth)

<https://www.legislation.gov.au/Details/C2013A00020>

National Disability Strategy 2010–2020

<https://www.dss.gov.au/our-responsibilities/disability-and-carers/publications-articles/policy-research/national-disability-strategy-2010-2020>

Guiding Principles for Accessible Authentication (2007)

<https://www.ausbanking.org.au/Industry-Standards/guiding-principles-for-accessible-authentication>

International sources

UN Convention on the Rights of Persons with Disabilities

<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>

Web Content Accessibility Guidelines

<https://www.w3.org/TR/WCAG21/>

Principles of Universal Design

<http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/>

How to Meet WCAG 2.0 (success criteria)

<https://www.w3.org/WAI/WCAG20/quickref/>

PDF/UA: The ISO standard for universal accessibility

<https://www.pdfa.org/pdfua-the-iso-standard-for-universal-accessibility/>

WCAG2ICT (Guidance on Applying WCAG 2.0 to non-Web Information and Communication Technologies)

<https://www.w3.org/TR/wcag2ict/>

The Centre for Inclusive Design

<http://centreforinclusivedesign.org/about-us/why-inclusive-design/>



Australian Banking
Association

About the ABA

With the active participation of 24 member banks in Australia, the Australian Banking Association provides analysis, advice and advocacy for the banking industry and contributes to the development of public policy on banking and other financial services.

The ABA works with government, regulators and other stakeholders to improve public awareness and understanding of the industry's contribution to the economy and community. It strives to ensure Australia's banking customers continue to benefit from a stable, competitive and accessible banking industry.
