

July 2022

*Accessibility obligations and
conventions framework for
the Data Standards Chair*



**PwC's Indigenous
Consulting**

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Purpose statement

About this report

The Data Standards Chair (**Chair**), as an official of the Department of the Treasury (**Treasury**), commissioned PwC's Indigenous Consulting (**PIC**), together with the Centre for Inclusive Design (**CFID**), to provide a report of their obligations for accessibility, including the future direction of these obligations, as they may relate to Data Standards.

Objectives

The objectives of developing this report are to:

- provide the Chair clear insights into their obligations and related conventions for Accessibility, Usability, and Inclusivity;
- outline at a high level the interlinkages between Accessibility, Usability and Inclusion; and
- identify potential future directions in Accessibility, to guide decision making in forthcoming research work related to improving Accessibility.

Scope of the report

The report documents:

- details of the obligations of the Chair related to Accessibility, Usability, and Inclusivity;
- a summary of current design standards, policies and frameworks;
- potential future directions of accessibility standards;
- benefits and risks related to compliance; and
- recommendations to improve Accessibility, Usability, and Inclusivity within the Consumer Data Right (**CDR**).

The scope of this report does not include a comprehensive legal review.

A draft version of this report was issued to Treasury in May 2022, with significant feedback being received from members of the Data Standards Body.

The updated final version shared with Treasury on 10 June 2022.

Intended audience

The Data Standards Chair is the primary owner and audience of this report, and they can use the report to guide decision about future actions that will allow Data Standards development to continue to comply with responsibilities in relation to Accessibility, Usability, and Inclusivity. The Chair may also share the report within CDR and publish it to external stakeholders to guide consultation and decision making, at their discretion.

Executive Summary

Informed consent is central to the operation of the Consumer Data Right (**CDR**). The legislative function of the Data Standards Chair (**Chair**), an Official of the Treasury, is to make and review Data Standards that define the format and process for how consumer data is accessed, with consent. If the process by which a consumer grants consent is inaccessible, then their Right is also inaccessible.

Legislation codifies the obligation for the Chair to provide equal access for use of the Data Standards, and to promote the interpretation of equal access of use for implementations based upon the Data Standards. This obligation emanates from the *Disability Discrimination Act 1992* (**DDA**) and is supported by edicts from the Australian Human Rights Commission (**AHRC**).

Accessibility standards are clearly outlined in W3C's Web Content Accessibility Guidelines (**WCAG**). Australian legislation and policy require compliance. To meet Accessibility obligations, the Chair should adopt WCAG to support delivering the CDR.

In relation to the operation of the CX Guidelines, the GOLD Design System provides a framework, and a set of tools, to help designers and developers build Australian Government products and services more easily. This system has been used to develop the CDR CX Guidelines and incorporates the *Usability* and *Accessibility* standards in alignment with the Digital Transformation Agency (**DTA**)'s Digital Service Standard (**DSS**). This system, however, does not fully support the functionality sought for the CDR, as reflected in the CX Guidelines. This means that certain portions of the CX Guidelines are not supported by the framework, and/or set of tools, that would have otherwise assisted and guided designers and developers with implementing them.

It is unlikely that the GOLD Design System will develop the components required to support the CX Guidelines and related CDR implementations. The Chair should consider addressing divergence from GOLD in order to support delivering a more accessible CDR consent model.

Accessibility is clearly a key part of ensuring that all Australians can access the CDR, but it does not cover all needs. Considering Accessibility together with Usability through an inclusive design lens gives a more holistic picture of what the Chair can do to ensure Australians can access their rights under CDR.

In contrast to Accessibility obligations, which are clearly outlined in international and national legislation, policy, and standards, neither Usability nor Inclusion have accepted conventions which clearly articulate responsibilities to decision makers. As the Chair, and the Data Standards Body (**DSB**), consider embedding equal access of use across the CDR consent model, research should be considered in order to support the development of a framework for the CDR which considers Usability and Inclusion.



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Recommendations

Recommendation 1

Whilst the CX Standards already mandate certain WCAG criterion, the Chair should consider more extensively incorporating WCAG into the Data Standards, the Data Standards artefacts themselves, and related products, to address their legislative obligations for Accessibility, including by:

- 1.1 Maintaining compliance with the current version.*
- 1.2 Having regard for WCAG's further guidance, especially:
 - 1.2.1 Mobile Accessibility;*
 - 1.2.2 Cognitive Accessibility;*
 - 1.2.3 Personalisation; and*
 - 1.2.4 Pronunciation.**
- 1.3 Determining the Level of compliance (A/AA/AAA) required for each Success Criteria, which may involve consulting with:
 - 1.3.1 AHRC*
 - 1.3.2 DTA*
 - 1.3.3 ABA; and*
 - 1.3.4 AER/ESC**

Recommendation 2

Given the current reliance upon a Design System which is not fit-for-purpose, the Chair addresses the divergence from the GOLD Design System. Options may include:

- 2.1 Advocating for Design System Au, an open-source community, to build the necessary modules;*
- 2.2 Seeking funding for these modules to be built, and advocate for their adoption into the GOLD Design System;*
- 2.3 Acquiring the GOLD Design System as part of the function(s) of the Chair, and/or DSB.; or*
- 2.4 (Preferred) Developing an independent Data Standards Design System that focusses on the needs of data sharing, and consent models, but incorporates components from other systems, such as the GOLD Design System where appropriate. This Design System would also include authentication in its scope.*

As suggested in the Inquiry into Future Directions for the CDR (see pp.188-191), option 2.4 could, if appropriate, support consistent data sharing methods across the economy.

Recommendation 3

The Chair commissions a scoping-study into the development of Usability and Inclusivity framework(s) with the intent of addressing their legislative obligations

Understanding Accessibility, Usability, and Inclusivity obligations

The legislative function of the Data Standards Chair (**Chair**), an Official of the Treasury, is to make and review Data Standards that define the format and process for how consumer data is accessed under the Consumer Data Right (**CDR**), with their consent. Informed consent is central to the operation of this Right. If the process by which a consumer grants consent is inaccessible, then their Right is also inaccessible.

Equal access for use describes equity of access for digital products and services

Equal access of use is an objective measure. Just like information security, this concept can be defined, tested and verified. And as a concept, it provides solid benchmarks for the Chair to clearly communicate to CDR participants, and regulators.

Equal access of use is defined the same in both the European ¹ and Australian Standards. ² It refers to a digital product or service affording *equal access of use* when the digital product or service meets two functional performance statements:

- a Enable any user to locate, identify, operate functions, and to access the information provided, regardless of their physical, cognitive or sensory abilities.
- b Maintain the privacy and security of any user at the same level regardless of the accessibility features of the content or service.

In order to comply with relevant legislative requirements, the Data Standards need to address both these performance statements, which is partly achieved – in terms of Accessibility - through compliance with the W3C's Web Content Accessibility Guidelines (**WCAG**). ³

The World Wide Web Consortium (W3C)

The W3C is the main international standards organisation for the World Wide Web.

The Chair's obligations to ensure equal access for use is codified in legislation

Legislation codifies the obligation for the Chair to provide *equal access for use* of the Data Standards, and to promote the interpretation of *equal access of use* for implementations based upon the Data Standards. This obligation emanates from the *Disability Discrimination Act 1992 (DDA)*.

The DDA states that, “*It is unlawful for a person who performs any function or exercises any power under a Commonwealth law or for the purposes of a Commonwealth program or has any other responsibility for the administration of a Commonwealth law or the conduct of a Commonwealth program, to discriminate against*

¹ ETSI EN 301 549 - V3.2.1 - Accessibility requirements for ICT products and services

² AS EN 301 549:2020 - Accessibility requirements for ICT products and services

³ <https://www.w3.org/WAI/standards-guidelines/wcag/>

another person on the ground of the other person's disability in the performance of that function, the exercise of that power or the fulfilment of that responsibility.”⁴

This legislative requirement for Accessibility, Usability, and Inclusivity equally applies to the powers and functions of the Chair, and the Data Standards Body (DSB), which has the sole function of assisting the Chair.

Closing the Gap data access target

The Closing the Gap framework acknowledges the ongoing strength and resilience of Aboriginal and Torres Strait Islander people in sustaining the world's oldest living cultures.

Closing the Gap is underpinned by the belief that when Aboriginal and Torres Strait Islander people have a genuine say in the design and delivery of policies, programs and services that affect them, better life outcomes are achieved. This framework also recognises that structural change in the way governments work with Aboriginal and Torres Strait Islander people is needed to close the gaps across numerous socio-economic, wellbeing and cultural indicators.

In 2020, new targets were committed to Closing the Gap, including the development of Target 17, which states, “People have access to information and services enabling participation in informed decision-making regarding their own lives.”⁵ This Closing the Gap target aligns with the Australian Government Open Data commitments,⁶ of which the CDR is a key component.

Closing the Gap is an important framework for the Chair, and DSB, to keep in mind when considering the Accessibility, Usability, and Inclusivity of the Data Standards.

Access is a Human Right

“Accessibility to banking is a fundamental human right.”

Anna Bligh AC CEO, Australian Banking Association, 2018⁷

The Australian Human Rights Commission (AHRC) states, “The provision of information and online services through the web is a service covered by the DDA. Equal access for people with a disability in this area is required by the DDA.”⁸

(See **Appendix 1** for detail on the Rights of Persons with Disabilities.)

The AHRC advice on the application of the DDA states equal access of use applies universally across society, including, “professional services, banking, insurance or financial services, ... telecommunications services, ... or government services; sale or rental of real estate; or administration of Commonwealth laws and programs.”⁹

⁴ Disability Discrimination Act 1992 Part 2 Division 2 Section 29: Administration of Commonwealth laws and programs

⁵ <https://www.closingthegap.gov.au/national-agreement/targets>

⁶ <https://www.pmc.gov.au/public-data/open-data>

⁷ https://www.ausbanking.org.au/wp-content/uploads/2019/05/Accessibility_Principles_for_Banking_web.pdf

⁸ World Wide Web Access: Disability Discrimination Act Advisory Notes ver 4.1 (2014) | Australian Human Rights Commission

⁹ Ibid

The AHRC further advises that this applies to any individual or organisation irrespective: ¹⁰

- of the digital format the information and/or service is provided, and/or
- whether provided for payment or not.

Consequently, expressing the requirement of equal access for all in the Data Standards is consistent with extant expectations placed upon all existing, and potential, CDR participants.

The AHRC considers that all digital goods or services should achieve a minimum conformance with WCAG level AA success criteria in order to afford equal access of use. Additionally, the AHRC advises, some digital goods or services may need to achieve conformance with at least some higher-level AAA success criteria. ¹¹

Consequently, how the Data Standards should meet different levels of each WCAG success-criteria (A/AA/AAA) needs to be determined. The Chair may decide to liaise with the AHRC in this regard.

A failure to provide Data Standards that afford equal access of use could exclude and discriminate against people with a disability, and doing so would breach the DDA; create reputational, program, and implementation risks for officials, the program, and the government; as well as negatively impacting businesses, and communities in Australia.

The Australian Human Rights Commission (AHRC)

The AHRC is the accredited national human rights institution (NHRI) for Australia. The Commission has a role engaging with UN human rights mechanisms, to promote and protect human rights both in Australia and within the international human rights arena.

Accessibility, Usability and Inclusion

Clearly Accessibility is a key part of making sure that all Australians can access the CDR, but it does not cover all needs. Considering Accessibility together with Usability through an Inclusive design lens gives a more holistic picture of what the Chair can do to ensure Australians can access their rights under CDR. Accessibility, Usability and Inclusion are all required under equal access for use.

Designing for **Accessibility** primarily addresses the needs of people with disabilities. Web accessibility means that people with disabilities can equally perceive, understand, navigate, and interact with websites and tools. It also means that they can contribute equally without barriers.¹² Accessibility standards are clearly outlined in WCAG. Legislation and policy require compliance.

Designing for **Usability** means ensuring that digital products and services are effective, efficient, and satisfying for the people who use them. Usability includes user experience (UX) design. Unlike Accessibility, Usability does not explicitly consider the needs of vulnerable users.

¹⁰ World Wide Web Access: Disability Discrimination Act Advisory Notes ver 4.1 (2014) | Australian Human Rights Commission

¹¹ Ibid

¹² <https://www.w3.org/WAI/fundamentals/accessibility-usability-inclusion/>

Designing for **Inclusion** means creating products and services that support people of all backgrounds and abilities to successfully achieve desired outcomes. Inclusion addresses a broad range of issues including:¹³

- accessibility for people with disabilities;
- access to and quality of hardware, software, and Internet connectivity;
- computer literacy and skills;
- economic situation;
- education;
- geographic location;
- culture;
- age, including older and younger people; and
- language.

Unlike Accessibility, neither Usability or Inclusion have accepted international or Australian conventions which clearly articulates responsibilities to decision makers. As the Chair, and the DSB, consider embedding *equal access of use* across the CDR consent model, they should consider Inclusion in a broad sense. This will align with requirements under DDA, WCAG, and the Australian Government Digital Service Standards.

Adopting this approach would require research in order to develop a framework for Usability and Inclusion, particularly with regard to vulnerable consumers. Such an approach would also align with priorities raised by the Assistant Treasurer Jones, Minister for the CDR, back in 2019, when he noted the potential impact of the CDR on vulnerable consumers needs to be monitored,¹⁴ and that more needed to be done in order to ensure that vulnerable CDR consumers are not discriminated against.¹⁵

This approach is also broadly reflected in the DSB's Consumer Experience (**CX**) Research¹⁶, which has adopted a 'no edge-case' approach in order to support the design of a more Accessible, Usable and Inclusive CDR.

¹³ <https://www.w3.org/WAI/fundamentals/accessibility-usability-inclusion/>

¹⁴ Mr Stephen Jones (2019) [Treasury Laws Amendment \(Consumer Data Right\) Bill 2019, Second Reading](#) (13:20)

¹⁵ Mr Stephen Jones (2019) [Treasury Laws Amendment \(Consumer Data Right\) Bill 2019, Second Reading](#) (17:01)

¹⁶ CX Research (2020) [Phase 3: Round 6, p.10](#)

Current Design Standards, Policies and Frameworks

Multiple design standards exist that describe accessibility requirements, as well as supporting policies and frameworks which guide implementation. Those most relevant to the CDR are described here.

Web Accessibility Initiative (WAI)

The W3C's WAI develops the international standards for Accessibility. The WAI works through an agreed process designed to ensure broad community input that encourages consensus development.

WCAG was developed through the W3C WAI process with the intent to provide a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

The WCAG standards have 13 guidelines. The guidelines are organized under 4 principles: *Perceivable, Operable, Understandable, and Robust*. For each guideline, there are testable success criteria. The success criteria are at three levels: A, AA, and AAA.

WCAG 2.0 is approved as an ISO standard: ISO/IEC 40500:2012. ISO/IEC 40500 is exactly the same as the original WCAG 2.0. The content of ISO/IEC 40500 is freely available¹⁷

WCAG 2.0 and WCAG 2.1 are both existing standards. WCAG 2.1 does not deprecate or supersede WCAG 2.0. The WCAG 2.2 draft is scheduled to be finalized by September 2022. W3C encourages the use of the most recent version of WCAG when developing or updating content or accessibility policies.

Whilst the W3C's WCAG is the most widely known and referenced component of the W3C Accessibility Standards, there is also supplemental guidance and technical specifications on such areas as Cognitive Accessibility Guidance, which is consistent with, and would strengthen, the application of the CDR's CX Principles:

Principle 3: The CDR is Comprehensible; and

Principle 4: The CDR is Simple and Empowering.

Consequently, the Chair, and the DSB, should review the W3C's guidance in light of their respective obligations. This review should especially include: Mobile Accessibility¹⁸, Cognitive Accessibility,¹⁹ Personalisation,²⁰ and Pronunciation.²¹

¹⁷ <http://www.w3.org/TR/WCAG20>

¹⁸ <https://www.w3.org/WAI/standards-guidelines/mobile/>

¹⁹ <https://www.w3.org/WAI/cognitive/>

²⁰ <https://www.w3.org/WAI/personalization/>

²¹ <https://www.w3.org/WAI/pronunciation/>

Australian Government Digital Service Standard (DSS)

The Digital Transformation Agency (DTA) outlines the Australian Government commitments to accessibility in their DSS.²²

Digital Service Standard 9: Make it accessible

Ensure the service is accessible and inclusive of all users regardless of their ability and environment.

*“You also have a legal requirement to ensure your service is **usable** and **accessible** to people with disabilities (see the Disability Discrimination Act 1992). Australian Government agencies are required to meet the Web Content Accessibility Guidelines (WCAG) 2.0 Level AA, which includes Level A (see mandate in Web Accessibility National Transition Strategy). You are strongly encouraged to meet WCAG 2.1 Level AA which will provide a more accessible experience. Conforming to WCAG 2.1 means you also conform with 2.0.”²³*

The DSS applies to Australian Government services that are:

- public facing;
- owned by non-corporate Commonwealth entities;
- new informational or transactional services (designed or redesigned after 6 May 2016); and
- existing high-volume transactional services.

The CDR’s Data Standards are an Australian Government service, and therefore fall under the DSS. The Chair, and the DSB, should satisfy themselves of their requirements to harmonise with the DSS; especially with regards to the Data Standards influencing the DSS. (See GOLD Design System.)

Australian Standards

In 2020 Standards Australia released AS EN 301 549:2020²⁴, *Accessibility requirements for ICT products and services*. It specifies requirements for information and communications technology to be accessible for people with disabilities. This standard is identical to the European standard of the same name, which is mandatory for European public entities to follow. This standard is harmonised with WCAG.

The Australian Banking Association’s (ABA’s) Accessibility Principles

ABA’s *Accessibility Principles for Banking Services*²⁵ invokes compliance with an alternate principles-based Accessibility framework: *the Principles for Universal Design*. (See **Appendix 2** for detail.) The ABA also maintain *Guiding Principles for Accessible Authentication*.²⁶

²² <https://www.dta.gov.au/help-and-advice/digital-service-standard/digital-service-standard-criteria>

²³ <https://www.dta.gov.au/help-and-advice/digital-service-standard/digital-service-standard-criteria/9-make-it-accessible>

²⁴ <https://www.standards.org.au/standards-catalogue/sa-snz/other/it-040/as--en--301--549-colon-2020>

²⁵ <https://www.ausbanking.org.au/priorities/accessibility/>

²⁶ https://www.ausbanking.org.au/wp-content/uploads/2020/05/ABA-Guiding_Principles_for_Accessible_Authentication.pdf

Existing requirements – Energy example

As new sectors and use cases are designated for the CDR, the Chair will need to have regard for the accessibility standards and conventions already required of these participants. For example, in the energy sector, the Australian Energy Regulator (**AER**) and Victorian Government Essential Services Commission (**ESC**) both released Vulnerability Strategies at the end of 2021, which reflects the AER’s second objective to “Reduce complexity and enhance accessibility for energy consumers”²⁷ and the ESC’s second objective to ensure “Services we regulate are more responsive, inclusive and accessible.”²⁸

The Chair, and the DSB, should compare the requirements for designated CDR sectors – and/or industries involved in designated use cases - against the Accessibility standards they adopt for the CX Data Standards.

GOLD Design System

GOLD Design System²⁹ provides a framework and a set of tools to help designers and developers build Australian Government products and services more easily. The system incorporates the usability and accessibility standards aligned with the Digital Transformation Agency (**DTA**)’s Digital Service Standard (**DSS**)³⁰. Originally developed by the DTA it is now supported by an open-source community (Design System Au).³¹

The GOLD Design System³² has been used to develop the CX Guidelines, and incorporates the Usability and Accessibility standards in alignment with the Digital Transformation Agency (DTA)’s Digital Service Standard (**DSS**). This system, however, does not fully support the functionality sought for the CDR, and reflected in the CX Guidelines. This means that certain portions of the CX Guidelines are not supported by the framework, and/or set of tools, that would have otherwise assisted and guided designers and developers with implementing them.

It is unlikely that the GOLD Design System will develop the components required to support the CX Guidelines, and related CDR implementations. The Chair should consider addressing divergence from GOLD in order to support delivering a more accessible CDR consent model. Options may exist to support the evolution of the GOLD Design System to incorporate divergences necessary for CDR, and other consent models more broadly. This could include participation by the DSB in the GOLD Design System, or the acquisition of the GOLD system by the Chair or DSB. While the active participation of the DSB in the Design System Au community may be valuable, however, it may also result in the DSB taking on responsibilities for GOLD Design System components that are not related to data sharing and consent models.

A more compelling option may be for the Chair to consider an independent Data Standards Design System. Similar to the approach taken in the Data Standards, which makes reference to external standards such as FAPI and WCAG, a Data Standards Design System could be specifically developed for the purpose of supporting consent models while also incorporating external standards and patterns, such as the GOLD Design System. This approach could maintain consistency with the GOLD Design System where appropriate, while maintaining the flexibility to refer to other standards and components where preferable.

²⁷ <https://www.aer.gov.au/retail-markets/guidelines-reviews/consumer-vulnerability-strategy>


²⁸ <https://engage.vic.gov.au/building-strategy-regulate-consumer-vulnerability-mind>

²⁹ GOLD Design System <https://github.com/designsystemau/gold-design-system>

³⁰ <https://www.dta.gov.au/help-and-advice/about-digital-service-standard>

³¹ Design System Au <https://designsystemau.org/>

³² <https://gold.designsystemau.org/>



An independent Data Standards Design System could have applications beyond the CDR, and, as suggested in the *Inquiry into Future Directions for the CDR* (see pp.188-191)³³, could support consistent data sharing methods across the economy.

³³ <https://treasury.gov.au/sites/default/files/2021-02/cdrinquiry-final.pdf>

Future directions and requirements in accessibility

Compliance requires constant monitoring as obligations will change over time

As with most international standards, accessibility standards evolve over time. Changes in web standards have and will continue to place additional requirements of what constitutes *equal access of use*. As with previous changes in web standards this will lead to changes in obligations.

Changes in standards are driven by:

- The W3C commitment to ongoing improvements in accessible experiences for people with disabilities; and
- A need to respond to new information types and ways of interacting with internet connected technologies.

Outlined below are three key changes in accessibility requirements relevant to the Chair, and the DSB:

Immediate horizon change: WCAG 2.2

The W3C's upcoming release of WCAG 2.2 in September 2022 will incorporate 9 additional success criteria³⁴ to what is currently included in WCAG 2.1. The additional criteria raise the minimum requirements of what constitutes *equal access of use*.

WCAG 2.2 Success Criterion 3.3.7: Accessible Authentication (Level A)

“For each step in an authentication process that relies on a cognitive function test, at least one other authentication method is available that does not rely on a cognitive function test, or a mechanism is available to assist the user in completing the cognitive function test.

Examples of mechanisms include:

- 1) support for password entry by password managers to address the memorization cognitive function test, and*
- 2) copy and paste to help address transcription cognitive function test.”*

Both the European and Australian Standards bodies have already advised of plans to update EN 301 549 to reflect the additional success criteria of WCAG 2.2. Similarly, the AHRC has communicated that its advice on web accessibility is out of date and has commenced initiatives to update their advice. An update in AHRC advice would in turn trigger an update by agencies that rely on that advice, such as DTA, and their DSS.

³⁴ <https://www.w3.org/WAI/standards-guidelines/wcag/new-in-22/>

Near horizon change: Personalisation Standards

The W3C's draft technical specifications on personalisation³⁵ provides the semantic structure,³⁶ vocab,³⁷ and syntax³⁸ for the personalisation interactions with web content. Such personalisation would improve the usability of the information and service, lower cognitive-load and strengthen consent.

These personalisation standards allow users to change how numeric information is represented, and/or change text to symbols. For example, people who have difficulty understanding numbers ("dyscalculia") could choose to have a temperature of 5°C replaced with a picture of a person wearing a hat, scarf, and mittens, and the text "very cold". As another example, people with severe language impairment who cannot read text, could choose to use symbols to represent content.

If the CDR's current Data Language Standards employed personalisation, for example by providing meaningful pictures and/or descriptive text on the consent screen, then the Accessibility, Usability, and Inclusivity of this consent would be improved.

Longer-term horizon change: WCAG 3

The W3C has commenced work on the successor to WCAG 2.2 to be known as W3C Accessibility Guidelines 3.0 (AG3)³⁹. A review of available information from the W3C's Accessibility Guidelines Working Group⁴⁰ indicates that:

- whilst currently an incomplete draft, it is anticipated for completion date sometime in 2026.
- it will be very **different** from previous versions of WCAG, including a different structure, different conformance model as well as a broader scope, beyond just web content.

The Chair and the DSB need to be aware that the eventual release of AG 3 will require resourcing to update and manage compliance of these new accessibility requirements within the Data Standards, as well as to educate CDR Participants and CDR Agencies to monitor and enforce new requirements.

Considerations for the Chair

As the context for the CDR further expands, the ongoing assessment of compliance with Accessibility standards will also increase in scale. Therefore, deciding on a suitable standard now is an important part of preparing for the future. A principles-based standard, such as WCAG, may scale better with the expansion of the CDR, particularly if these standards are maintained in order to reflect emerging technology and shifts in international attitudes. Selecting such an Accessibility standard would provide the heavy lifting for the Chair, and the DSB.

³⁵ <https://www.w3.org/WAI/personalization/>

³⁶ *Semantic structure* refers to an organisation that represents meaning.

³⁷ *Vocabulary* is commonly defined as "all the words known and used by a particular person."

³⁸ *Syntax* is how words combine to form larger units such as phrases and sentences.

³⁹ <https://www.w3.org/TR/wcag-3.0/>

⁴⁰ <https://www.w3.org/WAI/standards-guidelines/wcag/wcag3-intro/>

Benefits and risks related to compliance

Trust is crucial

The CDR gives consumers more control over their data, enabling them to access and share data with a view to accessing better products and services. Therefore, the success of the CDR relies on the trust of consumers and service sector partners who provide these services. Providing *equal access for all* and considering accessibility throughout product and service design will build trust with users. Conversely, a failure to consider accessibility risks losing trust with users. Once that trust is eroded, it is difficult to rebuild. Therefore, the Chair should consider Accessibility carefully in order to build and maintain ongoing trust with consumers.

The Chair is a corporate leader

The CDR is designed to be economy-wide; therefore what decisions the Chair makes influences stakeholders across sectors. Consequently, the Chair holds a position of influence, and can affect positive change in order to support outcomes for all Australians, including sending a clear message regarding Inclusivity.

Non-compliance comes with several risks

There are several risks for not complying with accessibility obligations:

- **Negative publicity or public perception of the CDR:** recent publicity relating to the airline industry demonstrates that poor accessibility experiences can generate negative publicity for large organisations. ⁴¹
- **Legal action:** given the legislative obligations under DDA, the Chair and/or DSB could risk legal action related to not providing *equal access for all*. The AHRC keeps a register of similar decisions under DDA. ⁴²
- Secondary effects for **sector organisations:** where the Chair is providing products and services for others to use, they may risk acquired liability. Those organisations may expect that the Chair, and DSB, have considered accessibility before providing those resources for others to use.

Compliance can offer wide-ranging benefits

Compliance delivers benefits because consumer diversity is the norm not the exception. Each consumer possesses their own unique combination of attributes such as ability (physical, sensory and cognitive), language, culture, gender, age and other forms of human difference. Understanding the differences and common needs will allow the CDR to support the delivery of better and more equitable products and services. Particular benefits of complying with accessibility obligations include:

- **Drives innovation:** Accessibility features in products and services often solve unanticipated problems for a broader group of users, rather than only those with identified accessibility needs.
- **Improves Usability:** Accessibility features are essential for some and useful for all.
- **Increases uptake:** More Australians can benefit from the CDR and build trust and confidence with the scheme, rather than those who are most likely and able to adopt it because do not experience the same barriers to access.

⁴¹ Airports and airlines on notice after people with disability speak out about humiliating treatment <https://www.abc.net.au/news/2022-05-16/reports-of-disability-discrimination-at-australian-airports/101070802>

⁴² DDA: Register of Court decisions <https://humanrights.gov.au/our-work/disability-rights/dda-court-decisions>



Appendices

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Appendix A United Nations Convention on the Rights of Persons with Disabilities (CRPD)

Australia is 1 of 185 countries that have ratified the *United Nations Convention on the Rights of Persons with Disabilities*⁴³. The CRPD asserts a range of fundamental rights and freedoms that people with a disability enjoy as members of society including:

- Article 4: (1)(g) requires signatories to “Promote access for persons with disabilities to new information and communications technologies and systems, including the Internet”.
- Article 9: requires signatories to take “appropriate measures to ensure to persons with disabilities access, on an equal basis with others, ..., to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public.
- Article 21: requires signatories to take “all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice.”

⁴³ <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>

Appendix B Principles of Universal Design

The authors, a working group of architects, product designers, engineers and environmental design researchers, collaborated to establish the following Principles of Universal Design to guide a wide range of design disciplines including environments, products, and communications. These seven principles may be applied to evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments.⁴⁴

PRINCIPLE ONE: Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines

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

PRINCIPLE TWO: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines

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

⁴⁴ <https://ncaonline.org/principles-of-universal-design/>

PRINCIPLE THREE: 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.

Guidelines

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

PRINCIPLE FOUR: Perceptible Information

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

Guidelines

- Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- Provide adequate contrast between essential information and its surroundings.
- Maximize "legibility" of essential information.
- Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

PRINCIPLE FIVE: Tolerance for Error

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

Guidelines

- Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- Provide warnings of hazards and errors.
- Provide fail safe features.
- Discourage unconscious action in tasks that require vigilance.

PRINCIPLE SIX: Low Physical Effort

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

Guidelines

- Allow user to maintain a neutral body position.
- Use reasonable operating forces.
- Minimize repetitive actions.
- Minimize sustained physical effort.



PRINCIPLE SEVEN: 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.

Guidelines

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

Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These Principles offer designers guidance to better integrate features that meet the needs of as many users as possible.

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