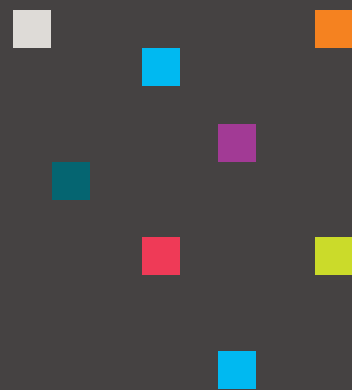**CENTRE FOR ACCESSIBILITY** | Celebrating an inclusive world

Centre for Accessibility Australia

TELCOS FOR ALL

Final Report
April 2021

Addressing key accessibility issues faced by consumers on telecommunications carrier websites

accan Australian Communications Consumer Action Network

About Centre for Accessibility Australia

The Centre for Accessibility Australia (CFA) is an award-winning disability-led not-for-profit organisation that works to promote digital access.

The digital world is an amazing resource that all of us increasingly rely on; however, the reality for people living with disability is that much of the internet remains inaccessible. The CFA Australia coordinates a number of projects designed to reduce the accessibility gap and empower organisations to effectively implement accessibility.
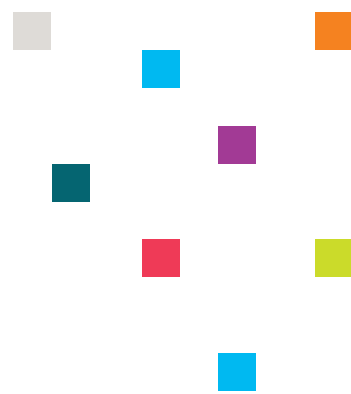
1. We provide training for organisations and individuals looking to implement accessibility.
2. We provide website auditing services for organisations looking to access and improve their accessibility.
3. We develop free, highly accessible online resources for content creators and organisations to promote and respond to digital access.
4. We create free online resources for people with disabilities on how to use Assistive Technology. These resources will include how-to guides for Assistive Technologies (AT), product advice about AT, and a free helpdesk that provides information and assistance about AT for people with disabilities.
5. We advocate and promote the accessibility movement via our accessibility campaign. The purpose of the campaign is to empower and encourage digital content developers to implement accessibility when designing online resources.
6. We celebrate Accessibility success stories through the biannual Accessibility Awards.

Acknowledgements

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Executive Summary

The Telcos for All project was undertaken by the Centre for Accessibility Australia as an ACCAN-funded project to improve the accessibility of the telecommunications sector for consumers with disability. The project particularly focused on the accessibility of plan, data usage and billing information. The project audited the websites of Telstra, Belong, Vodafone, Optus and Amaysim in accordance with the Web Content Accessibility Guidelines (WCAG) 2.1 Level AA standard to identify sector-wide accessibility issues and work with the providers to address them.

While there is some knowledge of digital access within all the telecommunications providers, the findings indicate that processes need to be improved to prevent known issues from occurring, and additional training is required to raise awareness on issues that do not appear to be known to providers which are preventing effective access for consumers with disability. There also appears to be a lack of user testing with assistive technologies.

The 'quick win' issues include the provision of alternative text for images, not using colour to indicate a change, providing 'skip to content' links and language declaration. The bigger issues include the need for descriptive links and buttons, consistency in the user experience between the main website and the dashboard portal, ensuring effective navigation, ensuring that the minimum 4.5:1 colour contrast ratio is implemented, ensuring that content conforms to W3C coding standards and that PDF files are not used as the sole source for content.

The overall scores of the websites place Amaysim at 60% compliance, Belong at 78% compliance, Optus at 62% compliance, Telstra at 68% compliance and Vodafone at 72% compliance. However, user testing saw these rankings change depending on the occurrence of specific accessibility issues. As such, the significance of these scores is that all websites need to address all their respective accessibility issues. App testing revealed that iPhone apps were generally an improvement over the website content equivalent although not all content was available. Android apps were mixed in their accessibility and performance.

Although there was some initial difficulty in contacting the respective providers, the telecommunications sector has been positive in its reception of the audit reports and has already taken action to address their respective accessibility issues. This is an encouraging sign for the sector going forward.

Recommendations for telecommunications providers are as follows:

1. All telecommunications providers need to address the issues raised in their respective audit reports, striving for WCAG 2.1 Level AA compliance;

2. Internal processes need to be improved to ensure hat known issues do not creep in during the publishing of new content;

3. Additional training is undertaken to upskill teams on the aspects of WCAG 2.1 Level AA which are not currently being implemented;

4. User testing with assistive technologies should be embedded;

5. Clear contact information needs to be available to consumers with disability so that future accessibility issues can be raised;

6. App version of website content needs to provide a consistent user experience; and

7. Websites and apps should be audited on a regular basis to ensure that accessibility improvements are maintained.

1.0 Introduction

1.1 Project overview

The Telcos for All project has been created as a direct response to requests by people with disability, their families and carers, due to accessibility issues in the Telecommunications sector. In response to the concerns raised, Centre for Accessibility Australia (CFA) applied for funding to the Australian Communications Consumer Action Network (ACCAN) Grants program as a mechanism to identify what accessibility issues are in the telecommunications sector, and how the issues can be addressed.

In 2020 CFA Australia received confirmation that it had been successful in the ACCAN grants funding round, and the Telcos for All project was undertaken over a 12 month period through the second half of 2020 and the first half of 2021.

1.2 Why this project is important

The Australian Human Rights commission states that there are nearly four million Australians with some form of permanent disability. In relation to digital access, ABS confirmed in 2018 that 1.1 million (28.5%) people with disability did not use the internet. This compares with 12% of the general public that do not participate online. In addition, over 250,000 people with disability lacked confidence or knowledge to use the internet and 1.4 million (38.4%) of older Australians did not use the internet of which most people are with disability.

Early research into this disability divide by Hollier (2006) and later research by Conway (2014) indicate that a significant factor relating to these statistics is the accessibility of digital content, particularly the accessibility challenges on websites. The research also suggests that if the accessibility barriers are resolved, people with disability are ready to embrace the benefits that independent access to online content provides. Sir Tim Berners-Lee, inventor of the World Wide Web, described the importance of web accessibility in these terms:

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect." In essence, Disability + Technology = Independence.

This project supports this equation by providing guidance as to how your telecommunications providers make their content more accessible. By implementing the recommended changes, people with disability will be able to access data usage, plan and billing content on a device of their choice using the assistive technologies they need.
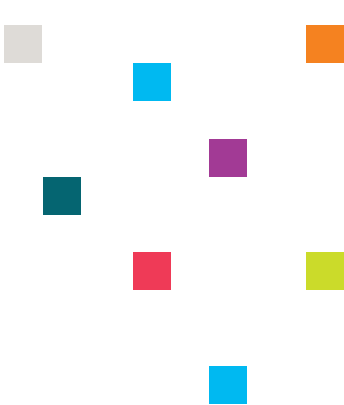
In addition, accessibility is not just a question of inclusivity, it is also a legal requirement under the AHRC World Wide Web Access: Disability Discrimination Act Advisory Notes ver. 4.1 (2014), which supports international web accessibility standards. Complaints fall under Section 24 of the Disability Discrimination Act 1992.

Although legal compliance can be a motivator for making websites accessible, CFA Australia focuses more on advocating for the importance of digital access, and providing support and education to organisations so they can understand the benefits accessible content can provide.

Additional information on the ways in which people with disability engage with online content can be found at the resource How People with Disabilities Use the Web produced by the World Wide Web Consortium (W3C).

1.3 Aims and objectives

The aim of the project has been to support the telecommunications industry in making its content more accessible. To do this, the project focused on undertaking audits based on five telecommunications websites with the selection based on consumer feedback. This included the three major telecommunications providers of Telstra, Optus and Vodafone and budget offerings Belong, a subsidiary of Telstra, and Amaysim, a subsidiary of Optus. The audits specifically focused on consumer online information relating to mobile and broadband plans, data usage and billing information.

To achieve this aim, the core objectives (which include those that will benefit) are as follows:

1. To audit alignment of websites and applications (and content) used by telecommunications providers, specifically Telstra, Vodafone, Optus, Belong and Amaysim, with international web standards;

2. To improve the accessibility standard of telecommunications providers' websites and applications through provision of audit findings and an effective pathway for remediation of issues;

3. Through the provision of easy-to-read and apply tip sheets, assist consumers to navigate common accessibility issues on telecommunications websites and applications on popular computing and mobile device operating systems;

4. To embed accessibility as an ongoing part of the telecommunication's providers' business through provision of a 'quick wins' checklist tip sheet on identifying and addressing accessibility issues;

5. To achieve broad industry awareness and buy-in on accessibility through delivery of a project research report drawing together audit findings, key issues across industry, tip sheets and training materials; and

6. Through delivery of training, upskill the telecommunications industry on developing accessible websites and applications that meet the broad user requirements of clients, including those with a disability, explore common issues across the industry, and advise on how to apply the Australian Human Rights Commission endorsed World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG).

1.4 Project deliverables

The deliverables of this project included:

- Providing Telstra, Optus, Belong, Amaysim and Vodafone with individual audit reports based on the accessibility of consumer-based website and app content.

- A publicly released report based on the auditing work that focuses on the telecommunications sector as a whole.

- A workshop to upskill telecommunications providers in relation to digital access and step through how the sector can improve the access of critical information to people with disability.

- Tip sheets provided to further assist the five telecommunications providers listed to support their internal work in addressing the issues identified in the project along with supporting consumer information.

- A video promoting the work of the telecommunication providers in addressing the accessibility issues discovered through the project.

As a result of this project, telecommunications providers will have an understanding as to the existing accessibility issues through the audits, then address the issues for consumers with disability through the training provided in the workshop.

This public report brings together the findings from the five audits undertaken, showing the common issues across the telecommunications industry and the steps needed to ensure that all consumers with disability can independently access and control their data usage, plan and billing information.

2.0 Auditing processes

2.1 The World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG)

The audits in this project have been conducted in accordance with the standards provided by the World Wide Web Consortium (W3C). The W3C is an international community founded in 1994 whereby member organisations, full-time staff, and public participants work together to develop web standards led by the World Wide Web's inventor, Sir Tim Berners-Lee, and W3C CEO, Jeffrey Jaffe.

While the web revolutionised information and communication, the way in which information was presented was often incompatible with Assistive Technology products. As such, in 1997 the W3C launched the Web Accessibility Initiative (WAI) to ensure that people with disability were able to effectively access online information. This led to the creation of the Web Content Accessibility Guidelines (WCAG), designed to provide guidance to ICT professionals as to how content can be made accessible.

The current version of the standard is WCAG 2.1, published in 2018. WCAG 2.1 consists of four design principles—Perceivable, Operable, Understandable and Robust (POUR)—which in turn consist of 13 guidelines. WCAG is also recognised by the International Organisation for Standardisation (ISO) as standard ISO/IEC 40500, cementing its importance as the definitive world accessibility standard.

An overview of the four design principles and the thirteen guidelines are highlighted in the WCAG 2.1 At A Glance document which defines them as follows:

Perceivable

1.1 Provide text alternatives for non-text content.
1.2 Provide captions and other alternatives for multimedia.
1.3 Create content that can be presented in different ways, including by assistive technologies, without losing meaning.
1.4 Make it easier for users to see and hear content.

Operable

2.1 Make all functionality available from a keyboard.
2.2 Give users enough time to read and use content.
2.3 Do not use content that causes seizures.
2.4 Help users navigate and find content.
2.5 Make it easier to use inputs other than keyboard.

Understandable

3.1 Make text readable and understandable.
3.2 Make content appear and operate in predictable ways.
3.3 Help users avoid and correct mistakes.

Robust

4.1 Maximise compatibility with current and future user tools.

Within each of the guidelines are Success Criteria which provide specific, practical pass and fail guidance for website testing. This audit is assessed against the Success Criteria to provide information as to what web accessibility issues are present in your site and how best to address them.

2.2 Website Accessibility Conformance Evaluation Methodology (WCAG-EM) 1.0

To ensure that the audits for the five telecommunication websites and associated apps were conducted in a professional manner, all auditing processes were followed in accordance with the Website Accessibility Conformance Evaluation Methodology (WCAG-EM). This is an approach created by W3C WAI for determining how well a website conforms to the WCAG standard. WCAG-EM 1.0 recommends structuring audit reports based on the following five-step evaluation procedure:

- Step 1: Define the Evaluation Scope
- Step 2 Explore the Target Website
- Step 3: Select a Representative Sample
- Step 4: Audit the Selected Sample
- Step 5: Report the Evaluation Findings

In December 2020-February 2021, five audits were undertaken in accordance with the WCAG-EM 1.0 process. This included a selection of sample pages relating to typical consumer use of the websites to find plan, data usage and billing information. The websites were tested on both desktop and mobile platforms, and the equivalent app was also tested on the iPhone and Android devices where applicable.

2.3 Baseline

To effectively test websites and apps, a baseline needs to be established so the results are consistent across the sample pages and the different audits. This includes the conformance target, web browsers, operating systems, assistive technologies, automated tools and any other tests undertaken. All tests were carried out by CFA Australia's disability-led auditing team. All tools were the latest versions as of January 2021 unless otherwise stated.

The baseline used for the five telecommunications websites and associated apps is as follows:

- Conformance target:
  › Web Content Accessibility Guidelines 2.1 Level AA
- Operating systems:
  › Windows 10 desktop, latest 2020 build
  › MacOS Big Sur desktop
  › iOS 13 Apple iPhone
  › Android 10.0 smartphone
- Browsers:
  › Microsoft Edge (Chromium) on Windows 10
  › Chrome on Windows 10
  › Safari on MacOS
  › Mozilla Firefox on MacOS
  › Safari on iOS
  › Chrome on Android
- Assistive technologies:
  › Narrator screen reader on Windows 10
  › NVDA screen reader on Windows 10
  › Magnifier on Windows 10
  › High Contrast Black colour theme on Windows 10
  › Dragon Naturally Speaking Pro on Windows 10
  › VoiceOver screen reader on MacOS,
  › VoiceOver screen reader on iOS
  › TalkBack screen reader on Android
- Assessment tools:
  › SortSite
  › WAVE extension for Chrome
  › Axe extension for Chrome
  › W3C validator

The selection of devices and software for this audit was based on a typical off-the-shelf configuration. This is important as ideally a person with disability should be able to simply purchase a device and access the content. The exceptions for this include the use of Dragon speech-to-text software as the built-in tools for Windows are still fairly limited for this feature, and the addition of the NVDA screen reader due to being available for free and the popularity of the tool.

3.0 Audit findings

3.1 Website findings

The consistent findings across all five telecommunications provider websites can be categorised as follows:

1. All telecommunications providers can make improvements to the accessibility of their content;
2. There is some accessibility knowledge present in all telecommunications providers, but accessibility issues are slipping through existing processes; and
3. There some major accessibility issues which do not appear to be known to telecommunications providers, requiring additional processes to be added.
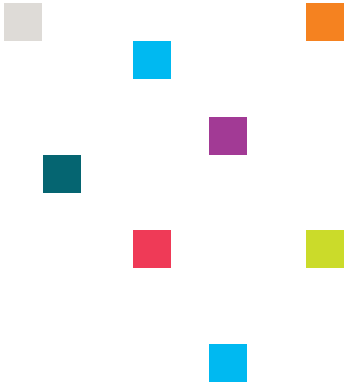
The specific requirements can be categorised into 'Quick wins' for easy to implement fixes and 'Key issues' which require significant new processes.

3.2 Quick wins

To provide some examples where issues have slipped through, most telecommunications providers failed the requirement to put alternative text on all non-text content or mark it as decorative. While most images comply with this requirement, indicating that there is internal knowledge about what needs to be done, most of the website still had the occasional image that was not correctly marked as decorative or did not feature alternative text. As a result, people with a vision or mobility impairment will find it difficult to perceive visual content. This suggests that some of the issues present relate more to internal processes than any reluctance to implement digital access requirements or a lack of knowledge around these particular accessibility issues.

Other issues that appear which are relatively straightforward to address include providing a 'skip to

content' link, providing multiple navigation options and declaring the language of the website page. Failure to implement this can impact on how a user can navigate around a website with assistive technologies, and the risk that people that have speech-to-text software default to a language other than English will not switch to English, instead trying to read English as the default language. In some cases these issues were addressed in some sections of a website, but not in others such as the user dashboard. This again suggests that there is some internal knowledge present, but the implementation of accessibility requirements has slipped through internal processes.

Other quick wins can be resolved by simply not doing something rather than trying to create content. A common issue across most of the providers is using colour by itself to indicate that a change has occurred. If an alternative were used such as putting a box around the object or some other indicator that does not involve colour, it would resolve the problem for people with a colour vision impairment.

3.3 Key issues

3.3.1 Colour contrast

While several issues appear to be recognised internally, there are other larger issues that consistently occur sector-wide. A common issue across the telecommunications websites relates to issues of colour contrast. Under WCAG 2.1 Level AA, there is a requirement for a 4.5:1 colour contrast ratio to be met. The websites tested had issues relating to colour contrast throughout the sample selection. As a result, it is likely that people with colour vision impairment would have difficulty in viewing the content. In addition, user interface elements also need a 3:1 colour contrast ratio to ensure that navigation has support for people with a colour vision impairment. Checking the colour contrast is a significant issue shared across the sector.

3.3.2 Navigation

Another consistent issue is navigation. WCAG 2.1 Success Criteria that relate to navigation include the need to ensure there is consistent navigation available, that headings are well structured, labels are present and there are multiple ways to navigate. All telecommunication websites have challenges in our user testing. Some of the issues include an inconsistent navigation experience between the user portal and the main website, no mechanism to return to other pages or identify where in the website the user is located, poor heading structure and missing labels. Ensuring that consumers with disability have a consistent experience navigating around website content, whether it is to purchase products or to log into a secure part of the website, needs to be operable, intuitive and effective.

3.3.3 Link purpose

Another issue of significance for most telecommunications providers was links or buttons that were not descriptive. If links are not descriptive screen readers and other assistive technology users will come across the text in the link and not understand its context. For example, plans that simply say 'buy' or 'more info' do not indicate which plan the text is referencing. Changing 'buy' to 'buy $20 plan' for example would address the issue. Telecommunication providers that do not focus on providing descriptive links and buttons tend to have this as a recurring issue across their content.

3.3.4 Keyboard navigation

While navigation issues can result from several WCAG errors, there appears to be a lack of keyboard navigation testing across the websites, or the testing is done based on expert screen reader users rather than a user who would only be familiar with basic assistive technology features. Issues that occurred included some navigational menus and difficulties getting to specific content. While in some cases it was possible to complete tasks using different screen readers over others, effective coding to the WCAG standard should maximise the delivery of a consistent experience across multiple assistive technologies. It is recommended that testing is done with different screen readers across different platforms to ensure that the implementation of features is standards compliant rather than optimising for one particular assistive technology.

3.3.5 Code validation

There is an issue relating to code validation tests which suggest that none of the telecommunications websites have code that correctly validates to W3C HTML standards and in some websites also have issues with CSS validation. Using code that does not validate correctly can cause assistive technologies to perform erratically and may account for some of the issues highlighted in the report.

3.3.6 PDF documents

Although this is not a common issue across all telecommunication providers, there are some that provide information in a PDF as the only mechanism for accessing that information. PDF documents can be inherently inaccessible, and tests on the PDFs suggest that there are many accessibility issues contained within the ones currently available. Ideally, this information should be available on the website to ensure compliance with accessibility standards.

3.4 App findings

In addition to website testing, consumer apps for the five telecommunications providers were also tested on both an iPhone and an Android-based smartphone running a largely stock installation of the Android 10 operating system.

In most instances, using the app was significantly easier on the iPhone than navigating the website. On the iPhone in particular it was often the case that accessibility issues present on the website equivalent, such as missing labels on buttons and navigation issues, had been addressed in the app. On Android however the quality varied significantly. For example, the Vodafone app continually crashed despite being tested on three different Android devices.

Although the experience was generally improved on the whole on both iPhone and Android over the website equivalent, there were several issues that applied to most apps:

1. Non-descriptive links were often still present which made it difficult to select a plan. However in broad terms it was improved over the website counterpart.
2. The apps were limited in the information that was available compared to the website. For example, finding specific plan and billing information was challenging in some apps.
3. The apps would often have links that took the user out of the app and open a website which cause confusion for screen reader users. Ideally the experience should always remain in the app.
4. The user experience on Android apps was significantly more difficult than its iPhone counterpart, particularly in the placement of content.

Based on these issues, it appears that the apps, especially the Android versions, have not generally received testing with assistive technologies or user testing. It is strongly recommended that telecommunications providers consider adding more content in the app versions of their content and undertake more testing to pick up accessibility issues.

4.0 Scorecards

Once the audit reports and associated screen reader audio recordings were provided to the telecommunications providers, there was some concern raised about how public the results would be made, and curiosity as to how each provider ranked compared to each other. To find a balance between the need to share sector information and the specific technical details of the audits, this report contains the overall scorecard of each audit, a comparison of each WCAG 2.1 Level AA Success Criteria in Appendix A, and a copy of the Executive Summary for each audit in Appendix B. However, the full audit reports will not be publicly available as they are intended for the internal processes of the telecommunications providers in addressing their specific accessibility issues.

While the WCAG scores provide technical guidance as to which websites are the most accessible, user testing suggested a different ranking order. Based on the user experience, the Amaysim and Belong sites were considered the best followed by Telstra, Vodafone and Optus. This was largely due to the website that prioritised effective descriptions for their links and good keyboard navigation. For others, the use of PDF documents in place of web content would again see a reordering of the rankings. For a person who is Deaf, the order was again changed based on one telecommunications provider that did not provide

adequate captions on their video content. These responses are important to note as different accessibility issues will impact different users in different ways, hence the need to address all Success Criteria in the WCAG 2.1 Level AA standard and ensure user testing is included in accessibility testing processes.

In addition, if the 'quick wins' discussed earlier were addressed consistently, the overall scores of all telecommunications providers would improve, and in the case of Telstra and Belong would increase significantly. This again demonstrates that improvements to internal processes to build on existing knowledge can make a big difference to achieving WCAG 2.1 Level AA compliance.

In terms of apps, the Amaysim app was considered the best overall experience despite its website receiving the lowest overall score. The other apps were considered an improvement over the website experience as previously discussed except for Vodafone on Android which continually crashed in user testing.

The overall scorecard for the websites are as follows:

Provider	Score
amaysim	60%
BELONG	78%
OPTUS	62%
TELSTRA	68%
vodafone	72%
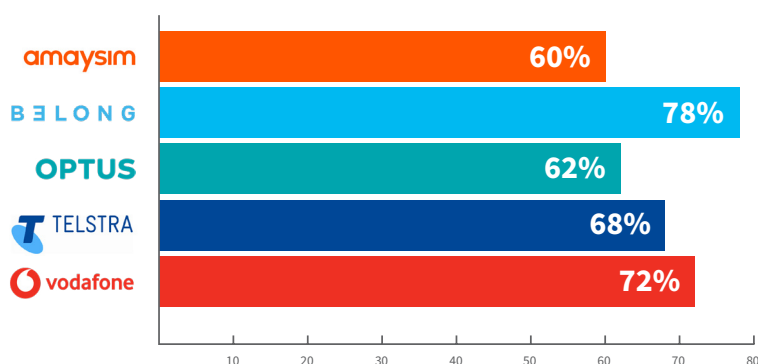
Based purely on the WCAG 2.1 Level AA assessments, the Belong website achieved the highest score followed by Vodafone, Telstra, Optus and Amaysim.

5.0 Reception

One of the initial challenges with the project was contacting all the telecommunications providers regarding the audits. Telstra and by connection Belong, proved the easiest to contact. Optus and Amaysim required a concerted effort through website contacts and social media to make the initial connection but was ultimately successful. Vodafone proved the most difficult to contact – with perseverance, an acknowledgement of the request was received on social media but the contact declined to discuss the topic of web accessibility. Fortunately ACCAN assisted with some other contacts after which Vodafone was also happy to be involved in the project and receive the audit.

The experience highlighted the significant challenges faced by people with disability who wish to lodge digital access issues with the providers. As such, it is recommended that all companies review their contact procedures to ensure that if people with disability are having accessibility issues there is a clear path of communication to receive complaints and address them.

Although making contact was initially an issue, there has been a positive outcome. In response to this project, Amaysim asked CFA Australia to provide guidance on its accessibility statement which has resulted in a clear process for making contact with the provider if accessibility issues need to be raised. This is a great outcome and a testament to the willingness by telecommunications providers to make accessibility improvements once there is awareness of the issues.

The Amaysim example is reflective of where the overall commitment on accessibility is in the sector. While there was some initial wariness as to the overall purpose of the project, all telecommunications providers were immediately pro-active in addressing the issues raised in the audit reports with online meetings and correspondence between all the providers to further discuss and address the findings. One telecommunications provider has also indicated further independent auditing to determine if the changes that have already been made are effective.

The immediate willingness of the sector to respond to the audit reports and address issues, even ahead of the workshop that will be delivered to upskill staff, is a positive sign that despite the issues, digital accessibility is considered to be an important issue and a willingness is present to improve the quality of online content.

6.0 Conclusion

The Telcos for All project, undertaken by CFA Australia and funded by ACCAN, endeavoured to support consumers with disability by addressing digital access issues in the telecommunications sector. In particular, the project focused on access to plan, data usage and billing information provided by Telstra, Belong, Optus, Vodafone and Amaysim.

The audit results confirm that there are still a number of accessibility issues present across the sector with some of the issues being 'quick wins' to address such as fixing some alternative text issues that have slipped through and not using colour to indicate a change. Other issues which does not appear to be addressed at all by most providers includes poor colour contrast, missing labels and content that does not validate to W3C standards. PDF accessibility is also an issue with some content not being available elsewhere.

However while issues are present, there is a commitment to addressing digital access issues in the sector which is encouraging. Importantly there needs to be a tightening of processes around the issues which are understood, and additional training around the issues which are not currently addressed. Although there are several ways in which the websites can be ranked against each other, the key findings of the project revolve around the need for the whole sector to improve the accessibility of their content, improve processes so that known issues don't slip through the cracks and further training in relation to the requirements contained in the WCAG 2.1 Level AA standard. There is also a need to improve the processes for people with disability wanting to contact telecommunications providers as issues arise.

If all these issues are addressed, it is the view of CFA Australia that significant improvement will occur in the telecommunications sector, ultimately supporting consumers with disability to choose a provider based on the product that best meets their needs rather than the website that is most accessible.

Appendix A:

Results against the WCAG 2.1 Level AA Success Criteria

Principle 1: Perceivable
Information and users interface components must be presentable to users in ways they can perceive.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Non-text Content: 1.1.1 All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. **(Level A)**	Pass	Fail	Fail	Fail	Fail
Audio-only and Video-only (Pre-recorded): 1.2.1 For pre-recorded audio-only and pre-recorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labelled as such: Understanding Success Criterion 1.2.1 **Pre-recorded Audio-only:** An alternative for time-based media is provided that presents equivalent information for pre-recorded audio-only content. **Pre-recorded Video-only:** Either an alternative for time-based media or an audio track is provided that presents equivalent information for pre-recorded video-only content. **(Level A)**	NA	NA	NA	NA	NA
Captions (Pre-recorded): 1.2.2 Captions are provided for all pre-recorded audio content in synchronised media, except when the media is a media alternative for text and is clearly labelled as such. **(Level A)**	NA	NA	Pass	Pass	NA
Audio Description or Media Alternative (Pre-recorded): 1.2.3 An alternative for time-based media or audio description of the pre-recorded video content is provided for synchronised media, except when the media is a media alternative for text and is clearly labelled as such. **(Level A)**	Fail	NA	Fail	Pass	NA
Captions (Live): 1.2.4 Captions are provided for all live audio content in synchronised media. **(Level AA)**	NA	NA	NA	NA	NA
Audio Description (Pre-recorded): 1.2.5 Audio description is provided for all pre-recorded video content in synchronised media. **(Level AA)**	Fail	NA	Fail	Pass	NA
Info and Relationships: 1.3.1 Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. **(Level A)**	Fail	Fail	Pass	Fail	Pass
Meaningful Sequence: 1.3.2 When the sequence in which content is presented affects it's meaning, a correct reading sequence can be programmatically determined. **(Level A)**	Pass	Pass	Pass	Pass	Pass
Sensory Characteristics: 1.3.3 Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. **(Level A)**	Pass	Pass	Pass	Pass	Pass

Principle 1: Perceivable
Information and users interface components must be presentable to users in ways they can perceive.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Orientation 1.3.4 Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential. **Note:** Examples where a particular display orientation may be essential are a bank check, a piano application, slides for a projector or television, or virtual reality content where binary display orientation is not applicable. **(Level AA)**	Fail	Pass	Pass	Fail	Pass
Identify Input Purpose 1.3.5 The purpose of each input field collecting information about the user can be programmatically determined when: • The input field serves a purpose identified in the Input Purposes for User Interface Components section; and • The content is implemented using technologies with support for identifying the expected meaning for form input data. **(Level AA)**	Pass	Pass	Pass	Pass	Pass
Use of Colour: 1.4.1 Colour is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. **(Level A)**	Fail	Fail	Fail	Fail	Pass
Audio Control: 1.4.2 If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. **(Level A)**	Pass	NA	Pass	Pass	NA
Contrast (Minimum): 1.4.3 The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1; Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement. Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement **(Level AA)**	Fail	Pass	Fail	Fail	Fail
Resize text: 1.4.4 Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. **(Level AA)**	Pass	Pass	Fail	Fail	Fail

Principle 1: Perceivable
Information and users interface components must be presentable to users in ways they can perceive.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Images of Text: 1.4.5 If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: Understanding Success Criterion 1.4.5 • Customisable: The image of text can be visually customised to the user's requirements; • Essential: A particular presentation of text is essential to the information being conveyed. **Note:** Logotypes (text that is part of a logo or brand name) are considered essential. **(Level AA)**	Pass	Pass	Fail	Pass	Pass
Reflow 1.4.10 Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for: • Vertical scrolling content at a width equivalent to 320 CSS pixels; • Horizontal scrolling content at a height equivalent to 256 CSS pixels. • Except for parts of the content which require two-dimensional layout for usage or meaning. **Note 1:** 320 CSS pixels is equivalent to a starting viewport width of 1280 CSS pixels wide at 400% zoom. For web content which are designed to scroll horizontally (e.g., with vertical text), the 256 CSS pixels is equivalent to a starting viewport height of 1024px at 400% zoom. **Note 2:** Examples of content which require two-dimensional layout are images, maps, diagrams, video, games, presentations, data tables, and interfaces where it is necessary to keep toolbars in view while manipulating content. **(Level AA)**	Fail	Pass	Pass	Pass	Fail
Non-text Contrast 1.4.11 The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent colour(s): • User Interface Components: Visual information required to identify user interface components and states, except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author; • Graphical Objects: Parts of graphics required to understand the content, except when a particular presentation of graphics is essential to the information being conveyed. **(Level AA)**	Pass	Pass	Pass	Pass	Fail
Text Spacing 1.4.12 In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all of the following and by changing no other style property: • Line height (line spacing) to at least 1.5 times the font size; • Spacing following paragraphs to at least 2 times the font size; • Letter spacing (tracking) to at least 0.12 times the font size; • Word spacing to at least 0.16 times the font size. **Exception:** Human languages and scripts that do not make use of one or more of these text style properties in written text can conform using only the properties that exist for that combination of language and script. **(Level AA)**	Fail	Pass	Pass	Pass	Pass

Principle 1: Perceivable
Information and users interface components must be presentable to users in ways they can perceive.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Content on Hover or Focus 1.4.13 Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true: • Dismissible: A mechanism is available to dismiss the additional content without moving pointer hover or keyboard focus, unless the additional content communicates an input error or does not obscure or replace other content; • Hoverable: If pointer hover can trigger the additional content, then the pointer can be moved over the additional content without the additional content disappearing; • Persistent: The additional content remains visible until the hover or focus trigger is removed, the user dismisses it, or its information is no longer valid. **Exception**: The visual presentation of the additional content is controlled by the user agent and is not modified by the author. **Note 1:** Examples of additional content controlled by the user agent include browser tooltips created through use of the HTML title attribute. **Note 2:** Custom tooltips, sub-menus, and other nonmodal popups that display on hover and focus are examples of additional content covered by this criterion. **(Level AA)**	Pass	Pass	Pass	Pass	Pass

Principle 2: Operable
User interface components and navigation must be operable.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Keyboard: 2.1.1 All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. **Note 1:** This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path-dependent input, but the underlying function (text input) does not. **Note 2:** This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation. **(Level A)**	Fail	Fail	Fail	Fail	Pass
No Keyboard Trap: 2.1.2 If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. **Note:** Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. **(Level A)**	Pass	Pass	Pass	Pass	Pass

Principle 2: Operable
User interface components and navigation must be operable.

	amaysim	BƎLONG	OPTUS	TELSTRA	vodafone
Character Key Shortcuts 2.1.4 If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true: • Turn off: A mechanism is available to turn the shortcut off; • Remap: A mechanism is available to remap the shortcut to use one or more non-printable keyboard characters (e.g., Ctrl, Alt, etc); • Active only on focus: The keyboard shortcut for a user interface component is only active when that component has focus. **(Level A)**	Pass	Pass	NA	Pass	NA
Timing Adjustable: 2.2.1 For each time limit that is set by the content, at least one of the following is true: **Turn off:** The user is allowed to turn off the time limit before encountering it; or **Adjust:** The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or **Extend:** The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or **Real-time Exception:** The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or **Essential Exception:** The time limit is essential and extending it would invalidate the activity; or **20 Hour Exception:** The time limit is longer than 20 hours. **Note:** This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action. **(Level A)**	NA	Pass	Pass	NA	NA
Three Flashes or Below Threshold: 2.3.1 Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. **Note:** Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. **(Level A)**	Pass	Pass	Pass	Pass	Pass
Bypass Blocks: 2.4.1 A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. **(Level A)**	Pass	Fail	Pass	Pass	Pass
Page Titled: 2.4.2 Web pages have titles that describe topic or purpose. **(Level A)**	Fail	Pass	Pass	Pass	Fail

Principle 2: Operable
User interface components and navigation must be operable.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Pause, Stop, Hide: 2.2.2 **For moving, blinking, scrolling, or auto-updating information, all of the following are true:** Understanding Success Criterion 2.2.2 **Moving, blinking, scrolling**: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and **Auto-updating:** For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. **Note 1:** For requirements related to flickering or flashing content, refer to Guideline 2.3. **Note 2:** Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. **Note 3:** Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so. **Note 4:** An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken. **(Level A)**	Fail	NA	NA	NA	NA
Focus Order: If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. **(Level A)**	Pass	Pass	Fail	Pass	Pass
Link Purpose (In Context): 2.4.4 The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. **(Level A)**	Fail	Pass	Fail	Fail	Fail
Multiple Ways: 2.4.5 More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. **(Level AA)**	Fail	Pass	Fail	Pass	Fail
Headings and Labels: 2.4.6 Headings and labels describe topic or purpose. **(Level AA)**	Pass	Pass	NA	Pass	NA

Principle 2: Operable
User interface components and navigation must be operable.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Focus Visible: 2.4.7 Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. **(Level AA)**	Fail	Fail	Fail	Fail	Fail
Pointer Gestures 2.5.1 All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential. **Note:** This requirement applies to web content that interprets pointer actions (i.e., this does not apply to actions that are required to operate the user agent or assistive technology). **(Level A)**	Pass	Pass	Fail	Pass	Pass
Pointer Cancellation 2.5.2 For functionality that can be operated using a single pointer, at least one of the following is true: - No Down-Event: The down-event of the pointer is not used to execute any part of the function; - Abort or Undo: Completion of the function is on the up-event, and a mechanism is available to abort the function before completion or to undo the function after completion; - Up Reversal: The up-event reverses any outcome of the preceding down-event; - Essential: Completing the function on the down-event is essential. **Note 1:** Functions that emulate a keyboard or numeric keypad key press are considered essential. **Note 2:** This requirement applies to web content that interprets pointer actions (i.e., this does not apply to actions that are required to operate the user agent or assistive technology). **(Level A)**	Pass	Pass	NA	Pass	Pass
Label in Name 2.5.3 For user interface components with labels that include text or images of text, the name contains the text that is presented visually. **Note:** A best practice is to have the text of the label at the start of the name. **(Level A)**	Pass	Fail	Fail	Fail	Pass
Motion Actuation 2.5.4 Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when: - Supported Interface: The motion is used to operate functionality through an accessibility supported interface; - Essential: The motion is essential for the function and doing so would invalidate the activity. **(Level A)**	NA	NA	NA	NA	NA

Principle 3: Understandable
Information and the operation of user interface must be understandable.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Language of Page: 3.1.1 The default human language of each Web page can be programmatically determined. **(Level A)**	Fail	Pass	Pass	Pass	Fail
Language of Parts: 3.1.2 The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. **(Level AA)**	Fail	Pass	Pass	Pass	Fail
On Focus: 3.2.1 When any component receives focus, it does not initiate a change of context. (**Level A**)	Pass	Pass	Pass	Pass	Pass
On Input: 3.2.2 Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behaviour before using the component. (**Level A**)	Fail	Pass	Pass	Fail	Pass
Consistent Navigation: 3.2.3 Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. (**Level AA**)	Fail	Fail	Fail	Fail	Fail
Consistent Identification: 3.2.4 Components that have the same functionality within a set of Web pages are identified consistently. (**Level AA**)	Pass	Pass	Pass	Pass	Pass
Error Identification: 3.3.1 If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. (**Level A**)	Pass	Pass	Pass	Pass	Pass
Labels or Instructions: 3.3.2 Labels or instructions are provided when content requires user input.. (**Level A**)	Pass	Pass	Fail	Fail	Fail
Error Suggestion: 3.3.3 If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardise the security or purpose of the content. (**Level AA**)	Pass	Pass	Pass	Pass	Pass

Principle 3: Understandable
Information and the operation of user interface must be understandable.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Error Prevention (Legal, Financial, Data): 3.3.4 For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true: 1. Reversible: Submissions are reversible. 2. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. 3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. (**Level AA**)	Pass	Pass	Pass	Pass	Pass

Principle 4: Robust
Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

	amaysim	BELONG	OPTUS	TELSTRA	vodafone
Parsing: 4.1.1 In content implemented using mark-up languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. **Note:** Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete. (**Level A**)	Fail	Fail	Fail	Fail	Fail
Name, Role, Value: 4.1.2 For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. **Note:** This success criterion is primarily for Web authors who develop or script their own user interface components. For example, standard HTML controls already meet this success criterion when used according to specification. (**Level A**)	Fail	Fail	Pass	Fail	Fail
Status Messages 4.1.3 In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus. (**Level AA**)	Pass	NA	NA	Pass	Pass

Appendix B: Summaries of audits

B.1 Amaysim summary

An accessibility audit for the Amaysim website was carried out by the Centre for Accessibility Australia (CFA) in January 2021. This audit incorporates the findings regarding any accessibility barriers identified during the process for consumer access to plan, usage, and billing information.

For decision-makers:

Overall, the Amaysim website appears to have considered accessibility during its development. However, a number of issues are present. The Android and iOS apps are generally good, so it is recommended that the focus of ICT staff focus particularly on addressing inconsistent navigation issues, any missing alternative text and labelling and then strategise addressing the larger structural issues.

For designers and ICT staff:

Most notably, desktop screen reader users will find it difficult to navigate in the User Dashboard portal due to elements not receiving keyboard focus. This will prevent a range of assistive technology users from being able to access usage and billing information.

Other issues include a lack of HTML validation for pages which can cause erratic behaviour for assistive technologies, poor colour contrast, inconsistent navigation between the main website and the User Dashboard portal, and links not being descriptive enough for standalone context. While the app accessibility is generally good, unexpected behaviour such as links opening up an external web browser should be flagged, or ideally changed to provide the information within the app itself.

B.2 Belong summary

An accessibility audit for the Belong website and associated apps was carried out by CFA Australia in January 2021. This audit incorporates the findings regarding any accessibility barriers identified during the process for consumer plan, usage, and billing information specifically.

For decision-makers:

The overall result was somewhat mixed with significant accessibility issues in some places such as colour contrast, while in other areas such as descriptive links, best practice has been observed.

Due to the website currently going through a redevelopment, it is recommended that ICT staff consider the issues and successes raised in this report to ensure that the next design iteration does not carry over issues to the updated content.

For designers and ICT staff:

Key issues relate to missing alternative text, poor colour contrast, some keyboard navigation issues and uses of HTML and CSS which did not validate correctly. It is also noted that some billing information is only available in PDF which can be difficult to access.

However, there are also some positives. The use of descriptive links and buttons is to be commended. Although the screen reader cannot pick up all elements, the overall experience in navigation on both the website and apps was straightforward and our user tests suggest that the plan, data, and usage information could be located with a screen reader despite the technical issues.

NOTE: the website is currently in a state of transition as it migrates in part from an old design to a new one which may account for some of the issues raised. While this accounts for some issues, it is still strongly recommended that accessibility training is provided due to the number of issues present.
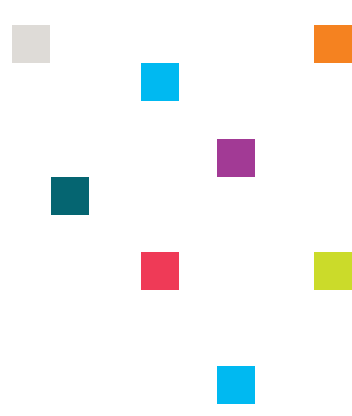
B.3 Optus summary

An accessibility audit for the Optus website and associated apps for usage, plan and billing information was carried out by CFA Australia in January 2021. This audit incorporates the findings regarding any accessibility barriers identified during the process.

For decision-makers:

The poor result means that people with disability using assistive technology are unlikely to effectively use the website or app in its current state. Issues relating to navigation and the slide-style layout of the plan information are of particular significance in preventing the purchase of Optus products. There is also no available option to locate billing information in the My Optus section of the website or app. Significant work will need to be undertaken by the technical team to address the issues discussed in this report for people with disability using assistive technology to be able to purchase and use Optus products. The lack of internal accessibility knowledge inferred by these results suggests that accessibility training should be provided to technical staff as a matter of urgency.

For ICT designers and developers:

The website contains significant accessibility issues that make it extremely difficult for people with disability using assistive technologies to identify plans and locate billing information. The most significant issues relate to the navigation, the slide presentation of plans and the notable lack of billing information in the My Optus area. Other technical issues relate to poor heading structure, non-descriptive links and code that doesn't validate correctly. There is also poor colour contrast, the use of colour to indicate changes and issues relating to zoom that impact on people with low vision specifically. It is strongly recommended that the issues represented in this report are addressed as a matter of urgency.

B.4 Telstra summary

An accessibility audit for the Telstra website and associated apps for usage, plan and billing information was carried out by CFA Australia in January 2021. This audit incorporates the findings regarding any accessibility barriers identified during the process.

For decision-makers:

The results suggest that accessibility was considered during the development and subsequent updates of the website. As such, most issues can be easily addressed. However, the issues that are present create significant issues for people with disability, particularly for people with low vision and mobility impairments.

Although the overall score of the website is relatively low, some of the issues identified are limited to occasional occurrences such as the alternative text issue that could be addressed quickly. As such, some minor improvements would likely see the overall score improve significantly. ICT staff should be encourage to start by addressing the quick wins such as fixing alternative text and colour contrast issues, then move to some of the larger structural issues around navigation and code validation.

For design and ICT teams:

The most significant barriers in practical terms relate to the navigation menu which is difficult to use on the desktop and mobile devices. The code has validation issues which can cause assistive technologies to behave erratically, and colour contrast issues are likely to impact on low vision users. There are also significant issues relating to non-descriptive links being present across the sample selection which impacts on vision and cognitive disabilities in particular.

Furthermore, the audit has identified that billing information is not available in its entirety in the user portal, instead requiring the user to download a PDF document which adds significant accessibility challenges. It is recommended that the information available in the PDF download is also available in its entirety in the secure user portal.

B.5 Vodafone summary

An accessibility audit for the Vodafone website was carried out by CFA Australia in January 2021 for the ACCAN-funded Telcos for All project focusing specifically on the accessibility of plan, usage, and billing information. This document incorporates the findings regarding any accessibility barriers identified during the process.

For decision-makers:

Overall, it is clear that Vodafone has considered accessibility in its development. However, issues are present, especially in the My Vodafone section. While the overall score may be lower than expected, many issues are isolated and can be addressed quickly which would substantially improve the overall score.

ICT staff should be encouraged to start by addressing the quick wins such as fixing alternative text and colour contrast issues, then move to some of the larger structural issues around navigation and code validation.

For design and ICT teams:

Issues of particular note include colour contrast, some link purpose issues and a lack of code validation which can cause erratic behaviour for assistive technology users. In the My Vodafone section there are a number of critical issues including a lack of language declaration, lack of page title declaration and a lack of the navigation and search functionality that was present in the main site.

Furthermore, the My Vodafone app on Android featured multiple crashes, as did the website on Android on older web browsers. Across multiple devices.
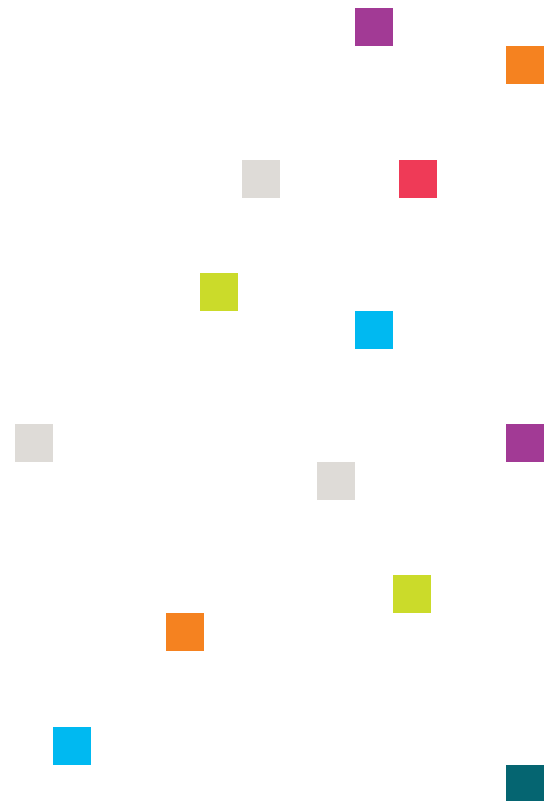
Appendix C:
Tip sheets

CONSUMER TIP SHEET

What is the purpose of this tip sheet?

This tip sheet is designed to help you get access to plan, usage and billing information on the websites and apps of telecommunications providers such as Telstra, Optus, Vodafone, Amaysim and Belong.

> **I'm thinking of purchasing a phone plan. What accessibility questions should I ask?**

Consider asking these questions before committing to a particular provider:

Is the billing information only available in a PDF?

Some companies only send a PDF with these details and do not have the information available on their website or app.

Do your videos have captions?

Some providers have their help information in videos that do not contain captions. If you are hard of hearing, check that the video content is accessible.

Can I test the app on my phone?

Testing the accessibility of the phone app before committing to a plan can help you make the best choice in viewing in important information before purchasing.

Which provider website best supports my disability?

All providers have website accessibility issues which may impact on your ability to find information. However, recent independent research by Centre for Accessibility Australia suggests that the Belong website is the most compliant to web accessibility standards.

How can I contact my provider about the accessibility issues I'm facing?

Here's the best way to contact your provider if you are experiencing accessibility issues.

Amaysim: visit the Accessibility Information Amaysim page.

Telstra: visit the disability services contact page.

For other telecommunications providers, consider contacting the providers' social media such as Twitter and LinkedIn to raise accessibility issues.

ACCESSIBLE TELECOMMUNICATIONS

TELECOMMUNICATION STAFF TIP SHEET

What is the purpose of this tip sheet?

This tip sheet is designed to support telecommunications staff in developer, design and content production roles to make their website and app content more accessible.

What are the 'quick wins'?

Recent research by Centre for Accessibility Australia has shown that some accessibility issues that are well known to staff can be overlooked from time to time.

Issues that often get overlooked include:

- » Adding alternative text to images, or marking them as decorative
- » Making sure that colour is not used to indicate a change
- » Making sure there's an easy way for consumers to navigate around the website such as moving between the user dashboard portal and the rest of the website.

What are some of the bigger issues that I need to know?

Some of the other issues that need to be considered are:

- » Making sure that the colour contrast meets the 4.5:1 colour contrast ratio for general content, and 3:1 for user interface elements such as buttons
- » Make sure that links are descriptive. If you read the link or button by itself, would it still make sense? Examples include buttons like 'buy' or 'read more'. These could be changed to 'buy $20 plan' and 'read more about the $20 plan' respectively.
- » Improve the accessibility of headings and labels. Many people with disability use assistive technologies that rely on heading and labels for navigation. Check that these work okay so people with disability can more easily find what they need.
- » Don't limit users to PDF files: always make sure that the same information that is in a PDF is also available on a webpage. This will help assistive technology users access the information if the PDF is inaccessible.

I'm a developer. Are there tools that I can use to check for accessibility?

Yes there are tools that can help. Please note though that tools can only detect some issues and having people with disability test content with their preferred assistive technologies is also important.

Two popular tools include:

- » W3C validator to check that code works correctly
- » WAVE extension for Chrome and Firefox to check issues.

Is there anything else I need to do?

It is a requirement of the Australian Human Rights Commission that all public facing content conforms to the W3C Web Content Accessibility Guidelines (WCAG) standard to the Level AA requirements. For further information on all the WCAG requirements, please visit the web accessibility Guides on the Centre for Accessibility Australia website.
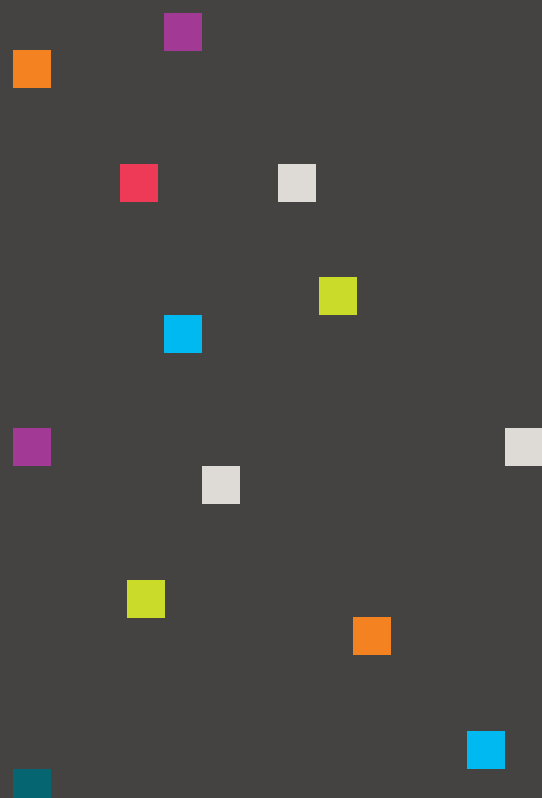
ACCESSIBLE TELECOMMUNICATIONS

CENTRE FOR ACCESSIBILITY

Celebrating an inclusive world