



Inclusion & Accessibility Labs

A Digital Day in the Life of a Person with a Disability in Ireland

2022

A report by
Inclusion & Accessibility Labs DAC

Working for Digital Inclusion

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Inclusion & Accessibility Labs DAC

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Inclusion & Accessibility Labs DAC



Introduction from the Director of IA Labs



Image description: Co-Founder and Director of IA Labs and Chief Technology Officer at NCBI, Kyran O'Mahoney pictured with An Taoiseach, Micheál Martin. Both are holding a laptop with the report cover on the screen.

Technology is the single greatest enabler for people with disabilities: it can remove barriers in employment, education, and daily living, allowing people with disabilities to fully engage with society and live independently.

This is the foundation of Inclusion & Accessibility (IA) Labs, which was established in 2021 to help public and private sector organisations to achieve digital equality. As we grow more reliant on the internet and the opportunities it provides us digital accessibility becomes crucial in creating a truly inclusive world. Regardless of a user's disability, they should be able to access any website, mobile app, or digital experience independently.



A Digital Day in the Life of a Person with a Disability in Ireland reveals whether or not this is actually the case. This report calls attention to the current state of digital accessibility in the websites and applications we use most often throughout the day. These services facilitate our most basic daily activities, such as checking bus schedules, catching up with friends, or browsing shops online. If someone is unable to find information about their bus route or cannot read a friend's text message because they must use a mouse to click on a link, that service is inaccessible.

Allowing them to use their keyboard to move through links without need of a mouse, however, would go a long way in improving digital accessibility.

Accessibility is a spectrum. There will never be one single solution that suits the needs and preferences of all users, but accessibility legislation and guidelines for best practices have been established for public sector bodies; soon, private companies will have to meet the same standards.

One in eight people in Ireland are currently living with a disability. As the population ages and grows, so will this number, and inaccessible online services block them from participating in critical everyday activities. Although Irish and European accessibility laws exist, organisations should take the initiative to have accessible platforms not just because of legal requirements, but simply because it's the right thing to do.



Kyran O'Mahoney

Co-Founder and Director

Inclusion & Accessibility Labs



Introduction to IA Labs

IA Labs was established in 2021 with the aim of pushing equal digital inclusion and accessibility all across Ireland.

Developed under the umbrella of the National Council for the Blind of Ireland (NCBI), the staff of IA Labs have training and experience in the various ways the internet has failed to consider people with disabilities, as well as the ways it can improve. They specialise in auditing websites, mobile applications, and digital documents against the Web Content Accessibility Guidelines (WCAG) and providing useful feedback on fixing issues. A completed audit done by IA Labs is a guarantee that a website or mobile app is an inclusive space for everyone and can be accessed regardless of a user's ability.

IA Labs believe wholeheartedly in giving people equal opportunities to make the most of the digital world and all the services it provides. With this report, they hope to highlight how important it is for Ireland to continue to strive towards full digital accessibility, so as to make the lives of over 600,000 people with disabilities easier on a daily basis.



Image description: Ten panels of digital assets are displayed on a screen, a hand points towards the asset at the centre. The image has a light blue background in the centre.



The IA Labs Team

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Image description: Representatives from IA Labs are pictured at the launch of the report at Government buildings in Dublin. The image features An Taoiseach, Micheál Martin T.D. and Senator Martin Conway. They are holding the Inclusion and Accessibility Labs logo and a laptop with the report cover page on the screen.



Abstract

The purpose of this document is to showcase how someone with disabilities in Ireland would use technological services in their everyday life, and how accessible or inaccessible these services are. It has nine sections: (i) a narrative piece, the accessibility of (ii) online retail, (iii) employment, (iv) social media, (v) transportation, (vi) news, (vii) food and drink takeaways, (viii) streaming services, and (ix) airlines.

Websites audited for this report have been tested for their compatibility with Job Access With Speech (JAWS) and Non-Visual Desktop Access (NVDA) screen readers, and with VoiceOver for any mobile applications. Screen readers are text-to-speech engines that translate information on webpages and applications to speech output. They are one of the main technologies used by people with disabilities, particularly allowing users who are blind or have visual impairments to navigate the internet.

The websites and apps included in this report have been tested against the WCAG 2.1 AA standard, which is the most up to date version of the Web Content Accessibility Guidelines. These have been named by the European Union as the accessibility standard that should be followed by all public sector bodies [1]. The EU Web Accessibility Directive 2016 was transposed into Irish law in 2020 [2].

This report has been designed according to NCBI's clear print guidelines.



Assumptions

It has been assumed that the people using the websites and mobile apps audited in this report have received basic training in screen readers and assistive technologies.

Only certain sections of each website and app in this report were tested since this was deemed sufficient in determining whether the online service provided was accessible or not. The section tested always included the login and registration portals as well as the most important user journeys of each website or app, in order to adhere to a standard testing procedure across the services and allow a fair comparison to be drawn between them. Tests were carried out in accordance with the WCAG 2.1 standard.

Every website and app mentioned in this report has been allocated a pass or fail mark based on how accessible it is. The passing criterion was that a user with a disability should be able to access every part of the section tested and complete critical user journeys independently. In this scenario, a 'pass' does not mean that an online service is perfectly accessible, but that it is usable. If a website or app failed, it did so on two factors. Its user journeys were either completely inaccessible to someone using only a keyboard or a lack of contextual labelling made it impossible for a user to interact with it.



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Executive Summary

A Digital Day in the Life of a Person with a Disability in Ireland highlights the challenges faced by people with disabilities when using websites and mobile apps for everyday activities. Technology has transformed the way we live: we can now shop for food and clothes, watch episodes of our favourite shows, read the news, communicate with friends, and apply for work – all without leaving the comfort of our homes.

In a world that is growing ever more reliant on the internet, it is imperative that everyone is able to use online services. Nonetheless, this is not the case for the 640,000 people in Ireland living with a disability.

Walking through the main paths a user would take in order to use online services, from retail and employment websites to social media, transport providers, and food delivery apps, this report provides each organisation with a pass or fail result, based on an IA Labs manual digital accessibility audit.

The report finds that 61% of the service websites and apps audited were considered unusable for people with disabilities – in particular, just 15% of these websites have up to date and adequate accessibility statements. As a result, the 640,000 people living with a disability in Ireland would not be able to interact with or use the majority of websites and apps featured in this report. While websites run by both public and private sector bodies were audited, it must be noted that the private sector is not required to meet the accessibility standards outlined in Irish and European law until June 2025. In advance of this deadline, it is clear that improvements can be made to ensure full compliance.



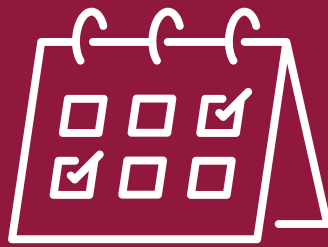
Ireland is a growing technological hub. We should be leading by example in making digital content and services accessible to everyone, so that people with disabilities can independently go through their everyday lives with the same opportunities and choices that technology has afforded to us all.

By publishing this research on Ireland's very first national 'Digital First Day', IA Labs hopes to highlight that even small, cost-effective adjustments to existing websites and apps can make the lives of people with disabilities easier, and unlock new customer bases for businesses.



Image description: A person is typing on a laptop, while digital symbols are visible. The symbols include a fingerprint, a lock and key, an e-mail and a notepad and pen.





A Digital Day in the Life of a Person with a Disability in Ireland 2022



A Digital Day in the Life of a Person with a Disability in Ireland

This morning, Aoife wakes up in a great mood. She turns off her alarm and checks her notifications: one is from **Facebook** saying she's been tagged in a photo by her friends. Aoife is an avid user of screen reader software and easily uses VoiceOver to navigate to the Facebook app to see which photo she was tagged in.

Unfortunately, her friend forgot to include alternative text when the photo was uploaded. Facebook's automatically generated alt text suggests it is a photo of "two women, possibly outdoors". Aoife sighs and wonders when the photo was taken and who else was in it. She closes the Facebook app and instead opens **Messenger**, where the keyboard-friendly layout means she can text her friends with no issues.

After eating breakfast, Aoife decides to open her laptop and go to **jobs.ie**. She is unemployed and has been looking for a new job for months, but is yet to get a response from the 50 different places she has applied to. She wants to work as a secretary because she loves talking to people and has quick typing skills. Using the NVDA screen reader, Aoife searches jobs.ie for any new openings. One listing catches her eye and, excited, she presses the Apply now button. She reaches the part of the page where she can upload her CV, but to her surprise, there seems to be no way for her to attach her CV to the application – the upload CV button doesn't open using only a keyboard.



Aoife isn't ready to give up on her job search just yet. She goes to **Public Jobs** to see if any state jobs are available. Although the website is a bit clunky and confusing to navigate, Aoife is able to successfully use her keyboard and screen reader to apply for a role.

Aoife is planning to attend her friend's wedding in Spain in three weeks' time. She bought a dress on **Dunnes Stores'** website last weekend and it arrives with today's post. While she was ordering the dress, she couldn't check the sizing guide on the website because the pop-up window with the sizing guide didn't come into screen reading order. She realises she bought the wrong size when she tries on the dress; she'll have to go to the city centre to return it.

Using the **Dublin Bus** app, she checks the real-time information for her closest bus stop. If Aoife didn't know the name of her bus stop, she would've had to use the interactive map on the Dublin Bus app to search for it, but the map's incorrect focus order means she can't read the information associated with each bus stop. Luckily, Aoife already knows the name of her bus stop and the routes that pass it.

She finds out her bus will arrive in five minutes. Aoife tries to walk quickly to her stop, but today everyone is emptying their rubbish bins and they block the entire footpath. She is forced to walk slower to ensure she doesn't accidentally run into a bin or knock it over, but this causes her to miss her bus. Frustrated, she checks the Dublin Bus app again, only to discover her next bus won't be for another 30 minutes.



Aoife has too many other tasks to do today and decides she can't wait that long. She tries to book a taxi using the **Free Now** app instead. It is very difficult to use with a screen reader: when she selects her pickup and drop-off locations, screen reader focus is forced to the main home page of the app and she must navigate back to the booking page again. Eventually, she manages to book her taxi, but the bad user experience makes her decide to avoid using the app in the future.

Aoife returns home later and immediately opens the **Just Eat** app, wanting to order takeaway for herself as a treat after a long afternoon. She has no issues using the app to order dinner. While waiting for her food to arrive, she checks the **Irish Times** website on her laptop. She is a regular reader of their articles and catches up on the latest news quickly.

When her takeaway arrives, she settles down with it in her sitting room. Aoife has been well-versed in technology since childhood and owns an Apple TV which has VoiceOver and Siri assistant enabled. She asks Siri to open **Netflix** and uses VoiceOver to choose a show to watch. Aoife has English audio descriptions turned on by default and finishes two episodes of her current show along with dinner.

After dinner, she opens her laptop again and goes to the **Aer Lingus** website. She needs to book her flight for her friend's wedding today and searches for round trips to Spain. Aoife can use the NVDA screen reader to choose her flight dates and enter her personal details, but when she decides to add special assistance to her ticket, she discovers the existing assistance options aren't varied enough and the link to the Aer Lingus Special Assistance Guide doesn't work.



Hesitantly, Aoife leaves the special assistance option empty for now and continues on to choose her seat and pay for her flight. She resolves to call ahead of time to make sure she can get the assistance she needs.

At the end of the day, Aoife goes to bed a bit upset. She had texted her friends to find out who was in the picture she was tagged in but felt overly reliant on their assistance, since social media is a very basic activity of daily living. More importantly, she can't stop thinking about that job opportunity that so perfectly fit her career plans but she could not even apply. She had spent at least 45 minutes trying to find another way to submit her job application on jobs.ie, but without success.

On a more positive note, she managed to return the dress for her friend's wedding to Dunnes Stores and purchased the right size there, even though it required an unnecessary amount of effort from her part and was a needlessly time-consuming process.

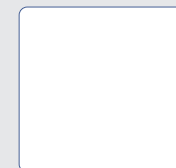
Being a person with a disability in Ireland comes with many challenges and obstacles every single day, because essential activities in daily life – which either require or are supposed to be facilitated by the use of technology – are not inclusive of people with disabilities. That is what Aoife's story is telling us.



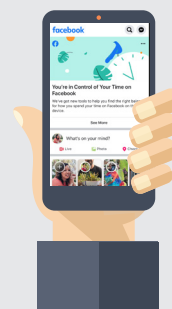


A digital day in the life of a person in Ireland with a disability

Image description: A woman with sunglasses and a cane holds the lead of her guide dog. She has brown hair and is smiling.



Images don't have alternative text, so I don't know what I've been tagged in



Jobs.ie



I can't upload my CV using a keyboard

DUNNES STORES



I can't purchase my favourite dress online because my screen reader can't read the size guide



Dublin Bus



The app doesn't work with VoiceOver so I can't find my closest bus stop

Image description: A silver car with 'Taxi' written on the front door on the right hand side, and a screen which shows the homepage of the FREE NOW taxi app.



FREE NOW



Is difficult to use but I manage to book a taxi



Image description: A TV remote control. It is black with coloured buttons.

NETFLIX



I've had a stressful day, but audio description on Netflix means I can watch the new show my friends are talking about

THE IRISH TIMES



Thankfully, the app allows me to keep up with the latest news using VoiceOver



JUST EAT



I'm exhausted when I get home, but the app works with screen readers



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Image description: An airplane.

Aer Lingus



I go to bed upset because I can't book special assistance for my flight. The Special Assistance Guide also doesn't work so I'm worried I'll miss my trip



Online Shopping



Online Shopping

This section of the report focuses on retail websites. Online shopping as an alternative to shopping in person has surged in popularity in recent years [3], giving everyone the opportunity to buy products and services without having to leave the comfort of their homes.

Retail websites are not public sector bodies and aren't obligated to comply with the EU Web Accessibility Directive 2016 [1], but the incoming European Accessibility Act (EAA) establishes standards for all essential products and services, including those provided by private sector companies [4]. Online shopping has become such a normal activity in our day-to-day lives that it would be good for companies to get ahead of the curve and provide digitally accessible services before the EAA is enforced in June 2025 [4].

The following websites were audited:

- Primark
- Zara
- H&M
- New Look
- River Island
- Dunnes Stores



Image description: A model shopping trolley filled with parcels wrapped in brown packaging, sits on the keypad of standard laptop.



Critical User Journeys

The main user journeys in the online retail industry are logging in and signing up for a user account, viewing a product, and being able to order and pay for it. A person with a disability being unable to complete any of these journeys would result in a fail.

The most common accessibility issues found on retail websites were to do with images missing alt text and screen reader and keyboard focus. The purpose of these websites is to facilitate the shopping process, but if images are missing descriptions or have alt text that is incorrect or isn't descriptive enough, users who are blind or have visual impairments will be confused and find it difficult to buy the products they want.

If screen reader or keyboard focus is incorrect, people using assistive technologies will face difficulties when shopping online. They rely on correct focus order to be able to find the information they need about products. If websites are missing this, it makes their content hard to navigate.



Accessibility Pass or Fail

Out of the six websites, only two passed IA Labs' implementation of the WCAG 2.1 AA standard (Primark and Dunnes Stores). All of the sites had a number of accessibility issues, but both Primark and Dunnes Stores can be used by disabled people with no major difficulties. The issues found across the six retailers included:

- Interactive elements need more descriptive labels
- Confusing or incorrect focus order
- Confusing heading structure
- Images need more descriptive alt text
- Input fields missing accessible labels

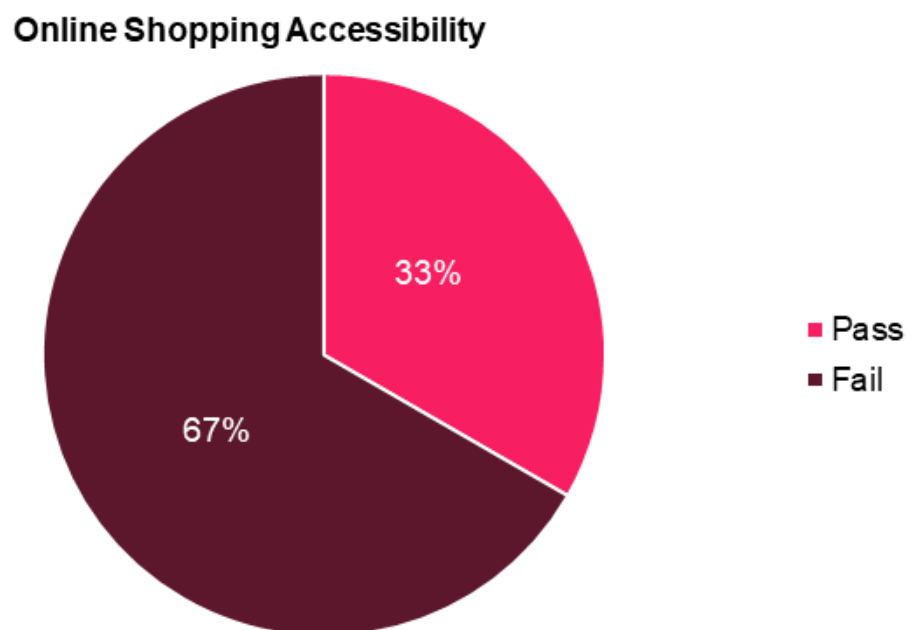


Figure 1: Online Shopping Accessibility

Accessibility Statement

- 5 (83%) had no accessibility statement on their site
- 1 (17%) had a statement but referenced an outdated standard (Zara)
- None (0%) referenced the current WCAG 2.1 standard

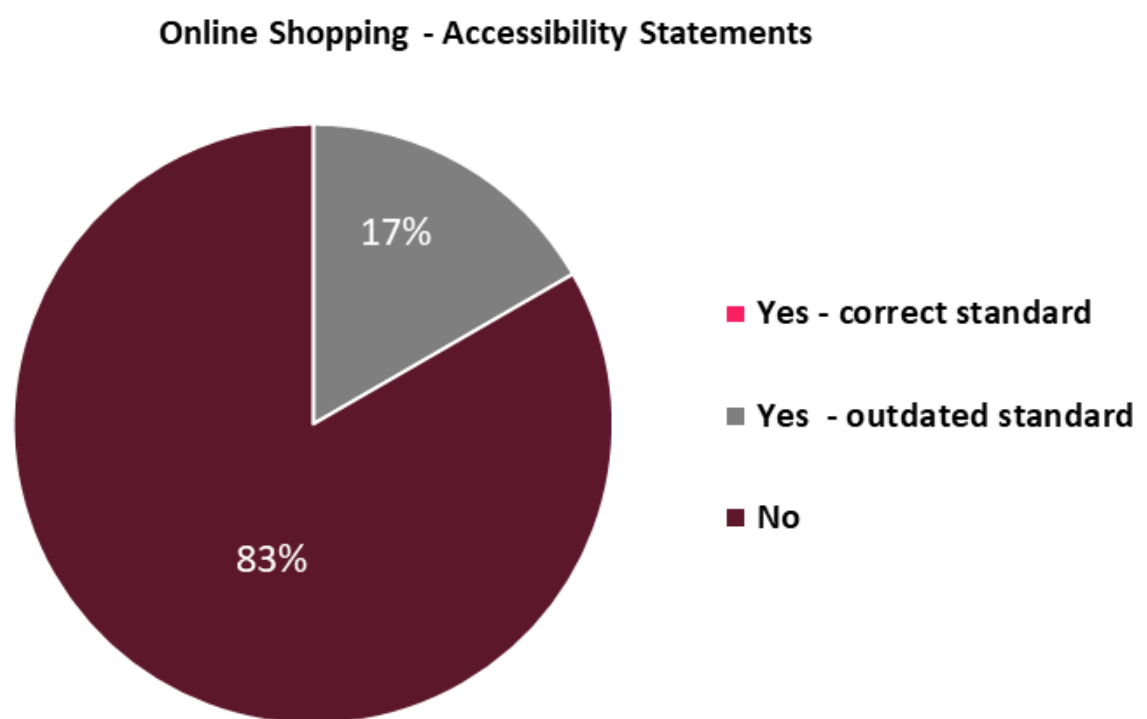


Figure 2: Online Shopping Accessibility Statements



Employment Websites



Employment Websites

Searching for work is a daunting experience even more so for people with disabilities. This section of the report focuses on employment websites operating in Ireland. The five websites audited were:

- Jobs.ie
- Public Jobs
- Irish Jobs
- Jobs Ireland
- Recruit Ireland

Two of these websites, Public Jobs and Jobs Ireland, are run by public sector bodies: the Public Appointments Service and the Department of Social Protection respectively. This means their digital content must meet the WCAG 2.1 standards as required by law. The other three sites are run by private sector companies, but the essential service they offer to the public means they must eventually comply with the EAA when it is enforced in June 2025 [4].

Critical User Journeys

The most important user journey on employment websites is searching and applying for a job. If it is difficult or impossible for a person with a disability to do so, the website would fail to be accessible.

The first and most critical accessibility problem on employment sites was interactive elements that couldn't be activated using a keyboard only,



namely the buttons used to upload CVs to a job listing. Anyone who does not use a standard mouse to browse the internet would find it impossible to apply for a job on these sites.

The second accessibility problem is to do with input fields and interactive elements needing more descriptive labels. If a job application form doesn't have clear instructions on how to complete it, users with cognitive or learning disabilities might struggle to enter the required information correctly. This can slow down the online application process and make it difficult to use an employment site.

Accessibility Pass or Fail

Of the five websites, two were considered usable for people with disabilities (Public Jobs and Recruit Ireland), though both still had minor issues with descriptive labelling. The accessibility problems found across the websites included:

- Unlabelled interactive elements
- Interactive elements that don't work using only a keyboard
- Input fields missing accessible labels or need more descriptive labels
- Confusing heading structure
- Low colour contrast issues



Employment Websites Accessibility

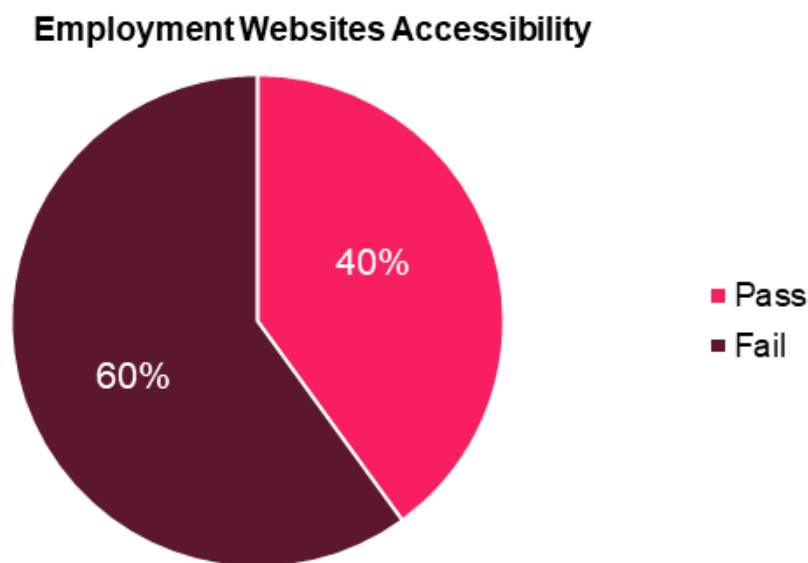


Figure 3: Employment Websites Accessibility

Accessibility Statement

- 3 (60%) had no accessibility statement
- 1 (20%) had an accessibility statement but did not reference the current WCAG 2.1 standard (Jobs Ireland)
- 1 (20%) had a statement and referenced the correct standard (Public Jobs)

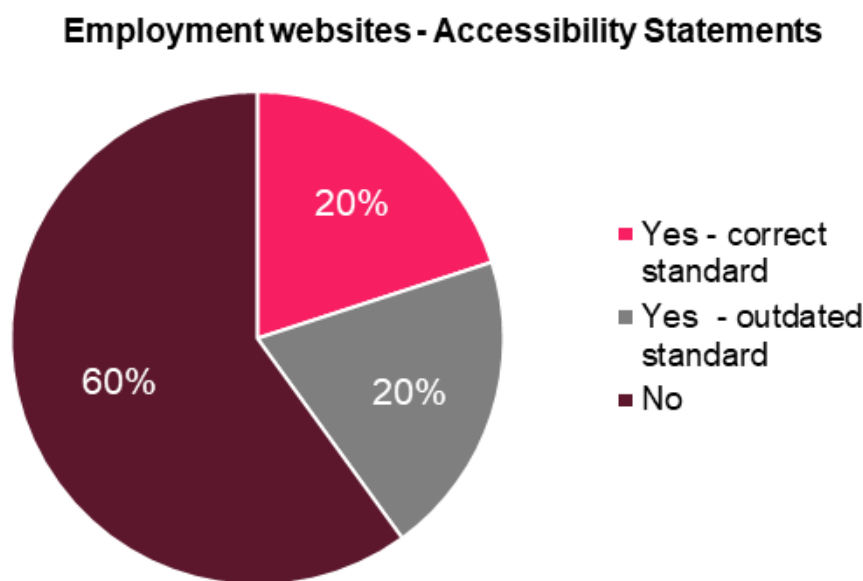


Figure 4: Employment Websites Accessibility Statements



Social Media



Social Media

Social media applications have become one of the primary ways for people to stay connected with each other. We can overcome barriers of distance and time and strengthen our personal networks in ways that weren't possible before. Accessible social media allows people with disabilities to be included in a significant part of everyday life and build a community.

The following platforms, which have the largest market share in social media in Ireland [5], were audited for this report:

- Facebook and Messenger
- Twitter
- Instagram
- Pinterest
- YouTube

All five platforms are run by companies based in the United States. This means even before the application of European or Irish accessibility laws, they are required to comply with the Americans with Disabilities Act (ADA), which states that places of public accommodation should provide people with disabilities full and equal enjoyment of their goods, services, and activities [6].

Critical User Journeys

The most critical user journeys on social media platforms are signing up and logging into a user account, interacting with a post, and sending messages to other users. The inability of a disabled person to complete any of these activities would mean the app is not accessible.



The problem with social media platforms is the accessibility of its content relies on users: they must provide alternative text for images themselves. Otherwise, focus order issues were common, which made using Pinterest and sending media over Instagram messages difficult for screen reader users.

There was also an issue where a mobile app was able to detect a screen reader was on and changed part of its user interface in response. Although this doesn't necessarily make apps inaccessible, it would be best if the same content was presented to all users to avoid issues, such as in the case of YouTube where the Create Account button didn't appear to screen reader users.

Accessibility Pass or Fail

Out of the five apps, Facebook alone passed IA Labs' implementation of the WCAG 2.1 AA standard and could be used by people with disabilities. The main issues found across the social media platforms included:

- Images without alt text
- Confusing screen reading order
- No skip to navigation links
- Focus issues
- Error messages that were not described in text
- Content or layout changing when a screen reader was turned on



Social Media Accessibility

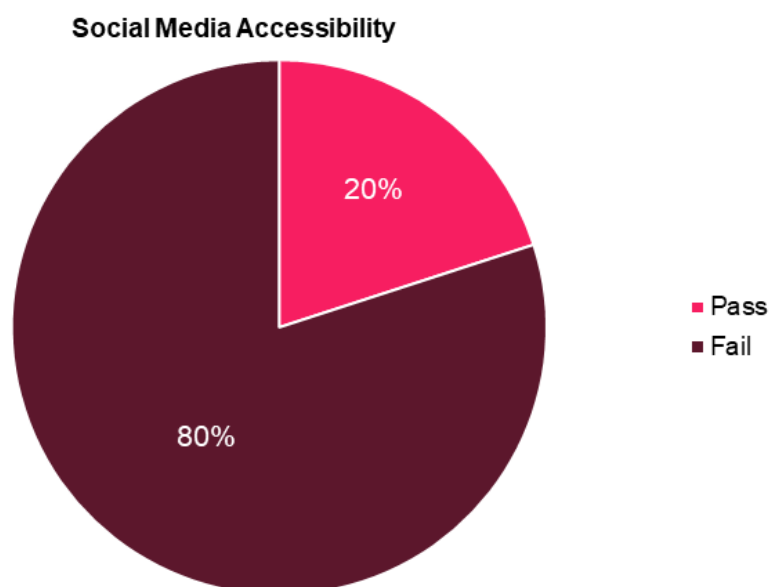


Figure 5: Social Media Accessibility

Accessibility Statement

- **2 (40%)** had no accessibility statement at all
- **3 (60%)** had an accessibility statement on the desktop website, but did not reference a standard (Facebook and Messenger, Twitter, Instagram)
- **None (0%)** had a statement which referenced the correct standard

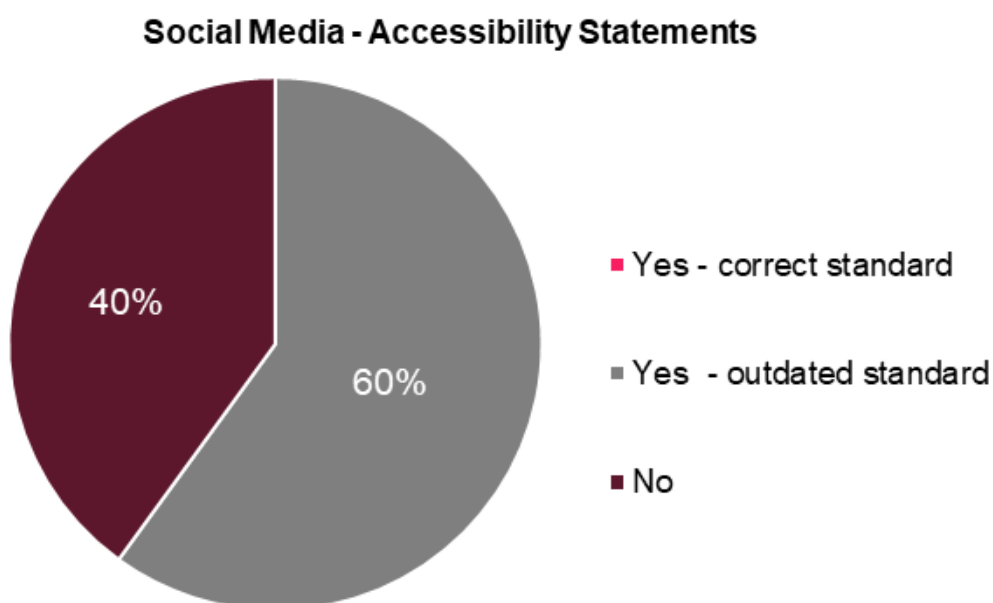


Figure 6: Social Media Accessibility Statements





Transportation Apps



Transportation Apps

Public transportation is an important aspect of modern life, and Irish residents in bigger cities are fortunate to have numerous choices in what kinds of transportation they can use. Transport organisations even provide mobile apps to complement their services and facilitate the process of booking taxis and checking bus and train schedules.

The apps audited for this section of the report were:

- Dublin Bus
- Luas
- Irish Rail
- Real Time Ireland
- Journey Planner
- Leap Card Top-Up
- Free Now

All of these apps except Free Now are provided by state-sponsored or state agencies, which are considered public sector bodies [2]. This means their digital services must meet WCAG 2.1 accessibility standards, as stated by the European Union (Accessibility of Websites and Mobile Applications of Public Sector Bodies) Regulations 2020 [2].



Critical User Journeys

The most important user journeys on transport apps are checking real time schedules and buying tickets. The app would fail digital accessibility standards if a person with a disability couldn't complete these journeys.

This happens when issues with screen reading and focus order arise, which is the main accessibility problem on transport apps. Incorrect screen reading and focus order can make the user experience very poor for people using assistive technologies. Focus traps block them from accessing important information and finishing user journeys.

Another issue found was an app containing flashing content. This can disorientate people and even cause someone with epilepsy or a different photosensitive seizure disorder to have a seizure, so this type of content should be avoided entirely.

Accessibility Pass or Fail

Out of the seven transportation apps, three passed IA Labs' application of the WCAG 2.1 AA standard (Luas, Irish Rail, and Leap Card Top-Up). These still have some issues, primarily not allowing users to change from portrait to landscape mode, but they are usable overall. Other accessibility issues found included:

- Focus traps
- Incorrect or confusing focus order
- Incorrect or confusing screen reading order
- Flashing content
- Unlabelled input fields



Transportation Apps Accessibility

Transportation Apps Accessibility

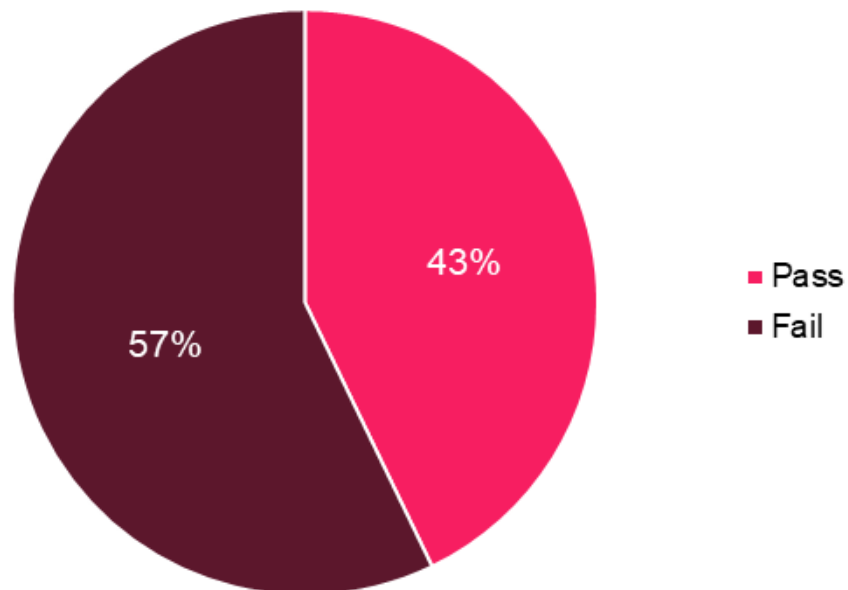


Figure 7: Transportation Apps Accessibility

Accessibility Statement

- **5 (71%)** had no accessibility statement
- **2 (29%)** had a statement on the desktop website and referenced the correct standard (Irish Rail, Leap Card Top-Up)

Transportation Apps - Accessibility Statements

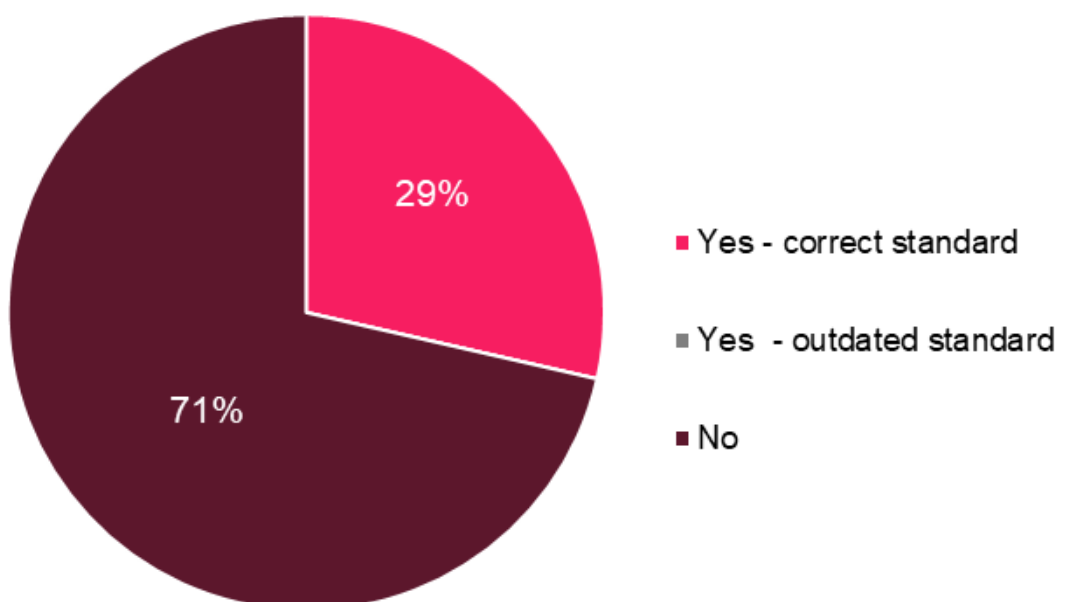


Figure 8: Transportation Apps Accessibility Statements





News



News

Online news publications have grown in popularity over the years. They give users easy access to news articles anytime and anywhere, as well as the ability to interact with the article or share it through social media. Of the five Irish news sites audited for this report, none are required to comply with the 2020 EU Regulations, including RTÉ News; it is operated by the state-sponsored body Raidió Teilifís Éireann, which is exempted from the regulations as a public service broadcaster [1]. However, the essential service provided by news publications means the European Accessibility Act will require them to be accessible by June 2025 [4].

The news sites chosen were:

- RTÉ News
- Irish Times
- Newstalk
- PressReader
- Irish Independent

Image description: A large pile of newspapers sit on top of each other. The content of the newspapers is not visible.



Critical User Journeys

Logging in and signing up for a user account, searching for and reading news articles are the main user journeys on news websites. The inability to access and complete these journeys using a screen reader or a keyboard only would result in a fail.

Unfortunately, this was the case on news sites. A number of interactive elements including buttons couldn't be activated with only a keyboard. Any person who does not use a standard mouse to browse the internet would find it difficult or even impossible to access some information and continue using these sites.

Another issue was one of the news publications providing a separate accessible version of their site. Although this is done with good intentions, a separate site is usually not updated as often or has less functionality than the main website because it requires more resources to maintain. It also sets users with disabilities apart and is not as inclusive as providing an accessible main site.

Accessibility Pass or Fail

Out of the five websites, two were considered usable for people with disabilities (RTÉ News and the accessible version of PressReader), though both still had a number of issues. The main accessibility problems found across the five news sites included:

- Confusing heading structure
- Interactive elements missing accessible labels or need more descriptive labels
- Interactive elements that can't be accessed using only a keyboard
- Focus order issues
- Videos that play automatically



News Apps Accessibility

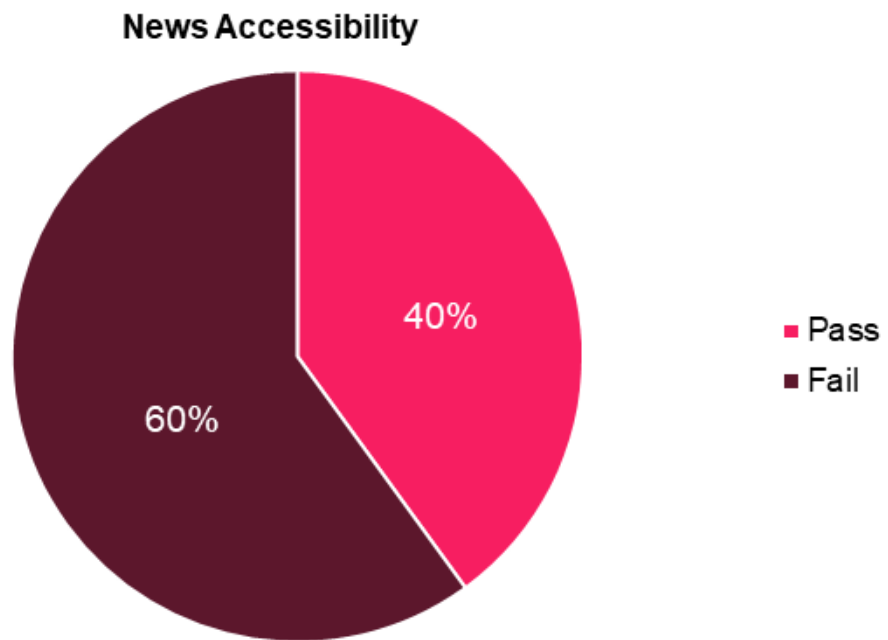


Figure 9: News Accessibility

Accessibility Statement

- **4 (80%)** had no accessibility statement
- **1 (20%)** had a statement and referenced the correct WCAG 2.1 standard (PressReader)

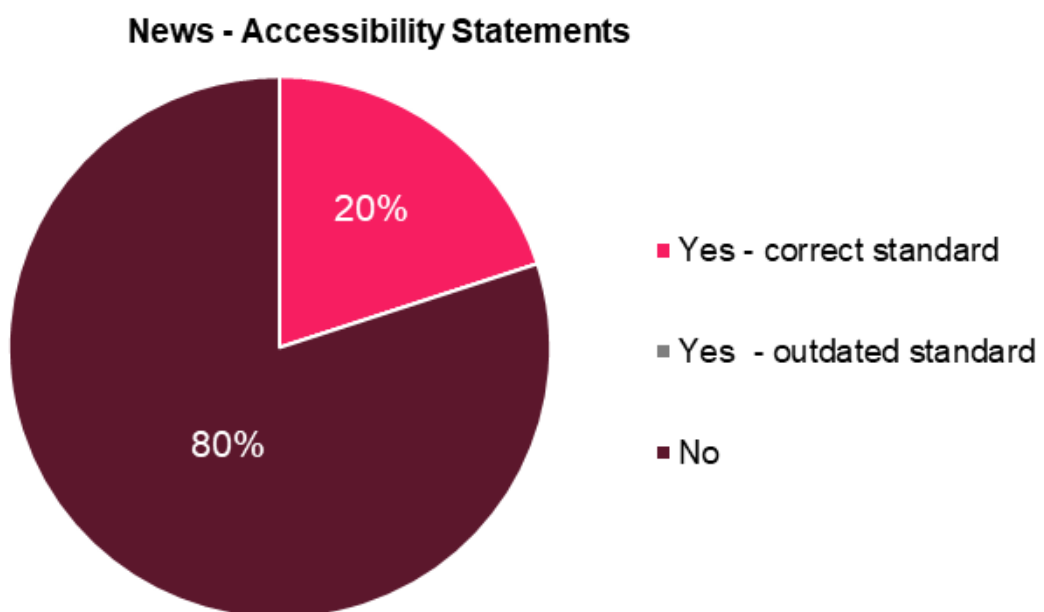


Figure 10:
News Accessibility Statements





Takeaway Apps



Takeaway Apps

This section of the report focuses on Ireland's most popular food and drinks apps [7]. Similarly to online retail, purchasing meals online has become a normal part of life, carried out by many people, including those with disabilities.

Although takeaway apps themselves don't fall under the EU Web Accessibility Directive 2016 [1], several of the organisations who provide this service are required to meet digital accessibility standards, namely McDonalds and Uber Eats which are based in the United States. They should have accessible public-facing services as outlined in the ADA [6]. The other three mobile apps are based in or operate primarily in the EU, which means they must eventually comply with the EAA and its requirements for equal access [4].

The top food and drinks apps in Ireland are:

- Just Eat
- McDonalds
- Too Good To Go
- Uber Eats
- Deliveroo



Image description: Four takeaway trays with plastic lids sit on top of two pizza boxes. There is a large brown paper bag to the right.



Critical User Journeys

The main user journeys on takeaway apps are signing up and logging in to a user account, searching for and ordering food and drinks. If a person with disabilities is unable to complete any of these activities, the app would not be considered accessible.

Critical accessibility issues found on takeaway apps were incorrect focus order and inaccessible interactive elements. People using assistive technologies will have a hard time navigating and using an app if its content does not have correct focus order. If focus gets stuck in some sections, these users become trapped and are unable to continue further through the food ordering process.

Users will also find it difficult to use a takeaway app if interactive elements such as links or buttons are not accessible. This blocks them from finding the information they need and finishing user journeys.

Accessibility Pass or Fail

Out of the five websites, one passed IA Labs' implementation of the WCAG 2.1 AA standard (McDonalds). Although it has some problems with confusing focus order, it is overall usable. The most common accessibility issues found on takeaway apps included:

- Input fields missing accessible labels
- Content missing a heading structure
- Focus order issues
- Focus traps
- Inaccessible interactive elements



Takeaway Apps Accessibility

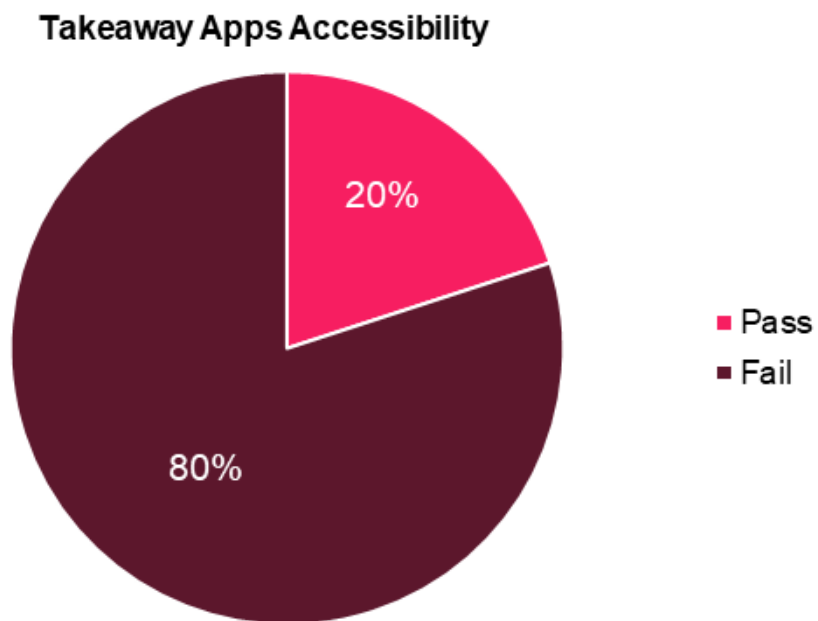


Figure 11: Takeaway Apps Accessibility

Accessibility Statement

- **4 (80%)** had no accessibility statement
- **1 (20%)** had an accessibility statement on the desktop website but referenced no standard (Uber Eats)
- **None (0%)** had a statement which referenced the correct standard

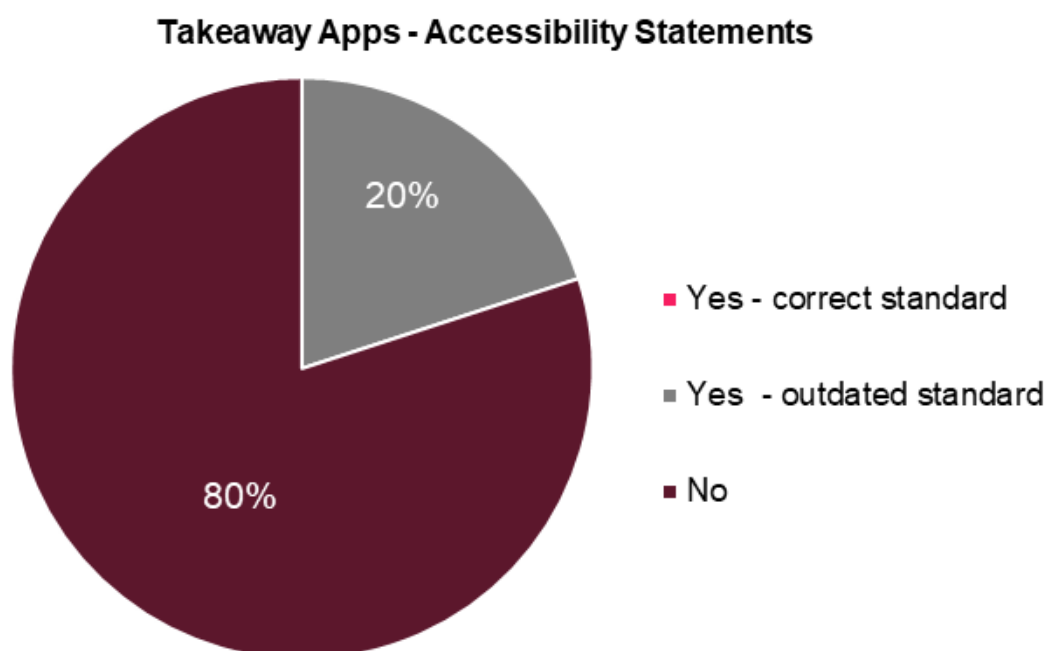
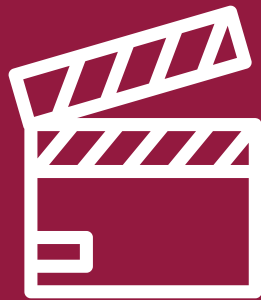


Figure 12: Takeaway Apps Accessibility Statements





Streaming Services



Streaming Services

Streaming services have taken over cable television as the primary way people consume TV shows. For people with disabilities, not only should the movies and episodes provided include accessibility features such as subtitles or audio descriptions, but also the mobile app platforms themselves.

All three of Ireland's top streaming services [8] are run by American-based companies, which means they must follow the accessibility guidelines stated in the ADA [6] even before European or Irish accessibility laws. These services are:

- Netflix
- Disney+
- Amazon Prime



Image description: A person is turning on their TV via a remote control to view the streaming service, Netflix. The TV is in the centre of the image and two potted plants sit either side of it.



Critical User Journeys

The most critical user journeys on streaming services are signing up and logging in to a user account, searching for and playing media. Media should also include accessibility features such as audio descriptions for people with visual impairments and subtitles for people who are deaf or hard of hearing. The failure to provide an accessible platform would be excluding people with disabilities from using a streaming service independently.

The most common accessibility issues on streaming platforms were confusing focus order and images missing alt text. If an app's focus order is not logical, users with disabilities will have a difficult time navigating the app and finding what they need. People who are blind or have visual impairments require images – in this case previews of TV shows and movies – to have descriptive alt text so they can access the same information as everyone else.

Accessibility Pass or Fail

Two streaming services passed IA Labs' application of the WCAG 2.1 AA standard (Netflix and Disney+). There is still room for improvement in the digital accessibility of the Netflix and Disney+ mobile apps, but people with disabilities should have no major problems using them.

The main issues found included:

- Incorrect or confusing focus order
- Images missing alt text descriptions
- Missing heading structure



Streaming Apps Accessibility

Streaming Services Accessibility

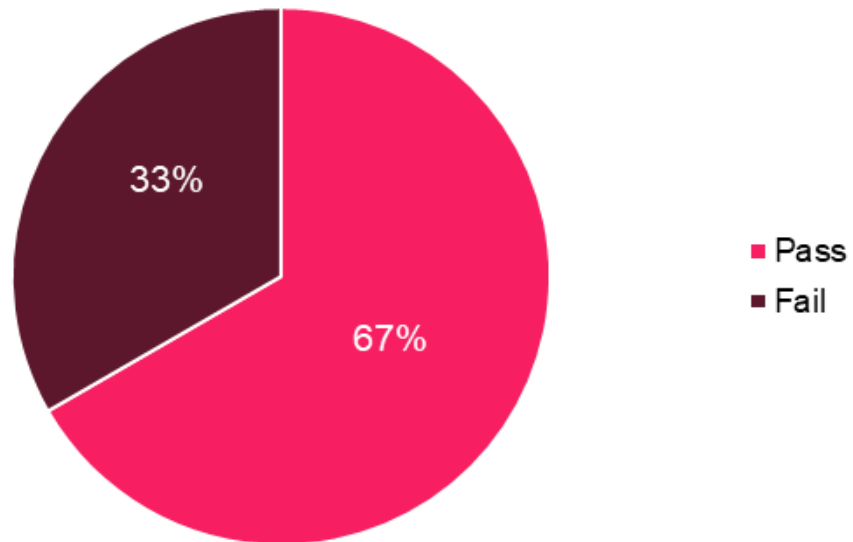


Figure 13: Streaming Services Accessibility

Accessibility Statement

- **2 (67%)** had no accessibility statement
- **1 (33%)** had an accessibility statement on the desktop site but referenced no standard (Netflix)
- **None (0%)** had a statement which referenced the correct standard

Streaming services - Accessibility Statements

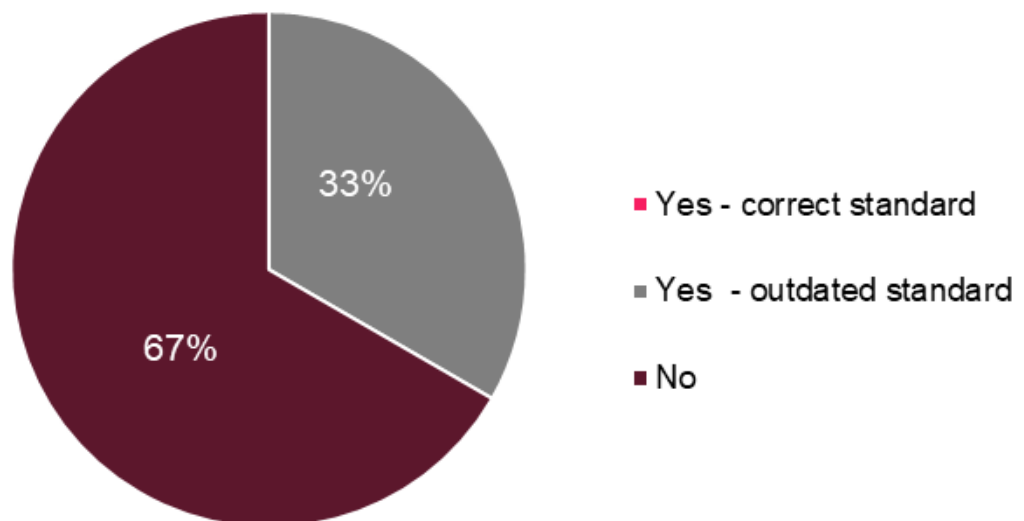


Figure 14: Streaming Services Accessibility Statements





Airlines



Airlines

This section of the report focuses on airlines and their web content. All people, regardless of their disability, deserve equal access to the digital services of airlines and should be able to search for information about flights or book their own tickets.

The websites chosen for this report, who are Ireland's top airlines by seat share [9], are:

- Ryanair
- Aer Lingus
- British Airways
- Norwegian Air
- Lufthansa



Image description: An airplane flies high in the sky on a clear day, with no clouds visible. The aircraft reads 'Ryanair'.



Critical User Journeys

Main user journeys on airline websites include the ability to book special assistance and purchase tickets for a flight. If a person with a disability can't complete these activities independently, it would result in a fail.

The most critical issues in the airline industry are error messages not being displayed in text and unlabelled interactive elements. Links, buttons, and input fields in booking forms need to have clear labels in order to help all users, including those with cognitive or learning disabilities, to correctly fill in the required information. User experience becomes very poor if these labels are missing or are not descriptive enough, which can result in people making more mistakes.

However, these mistakes also need to be clearly explained to users. Error messages that are not displayed through text and instead shown only through red or green symbols might not be understood by people with disabilities, especially those who are colourblind.

Accessibility Pass or Fail

Out of the five airline websites audited for this report, three passed (Aer Lingus, Lufthansa, and the accessible version of Norwegian Air). These still have a number of issues but are overall usable for people with disabilities. The main issues found included:

- Error messages are not displayed in text
- Interactive elements missing accessible labels or need more descriptive labels
- Images missing alt text
- Focus order issues
- Confusing heading structure



Arline Apps Accessibility

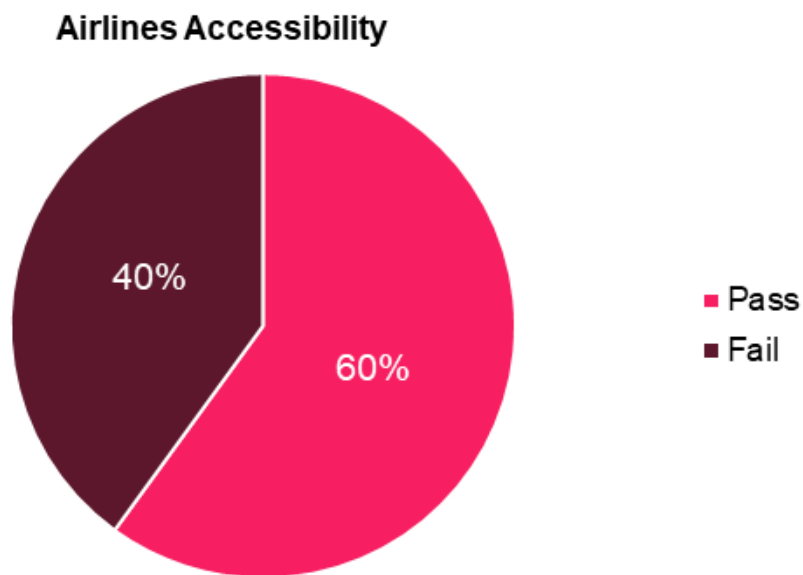


Figure 15: Airlines Accessibility

Accessibility Statement

- **2 (40%)** had no accessibility statement at all
- **1 (20%)** had an accessibility statement but it did not reference the current standard (Norwegian Air)
- **2 (40%)** had a statement which referenced the correct WCAG 2.1 standard (Aer Lingus, British Airways)

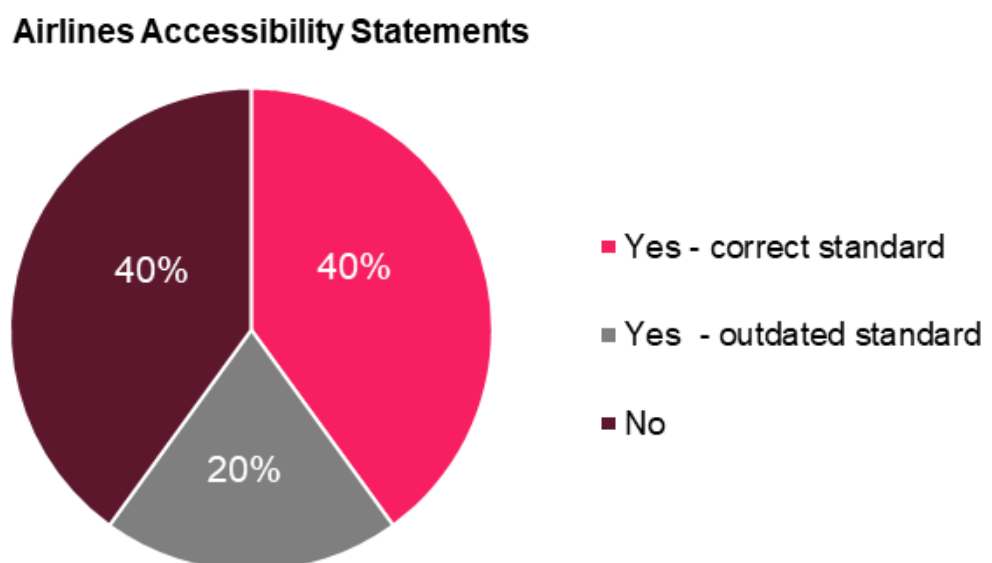


Figure 16:
Streaming Services Accessibility Statements





Overall Comparisons



General Overview

Accessibility Pass or Fail

Out of the 41 websites and apps audited for this report, 16 of them were considered usable for people with disabilities and therefore passed.

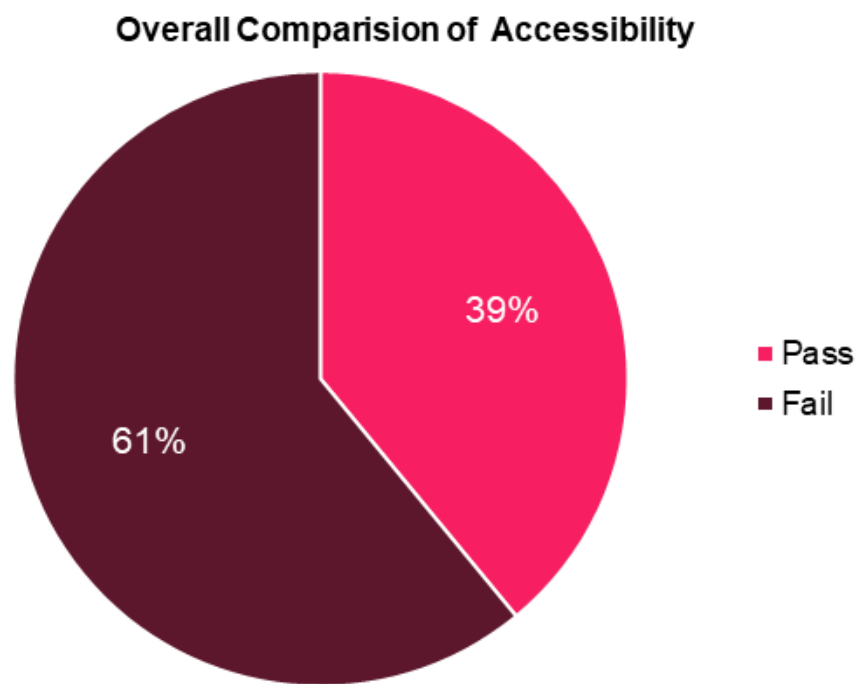


Figure 17: Overall Comparison of Accessibility

Accessibility Statement

Out of the 41 websites and apps, only 14 have an accessibility statement, eight of which reference an outdated accessibility standard or do not reference a standard at all. Only six organisations have a statement mentioning the current WCAG 2.1 AA standard.

Overall Comparison of Accessibility Statements

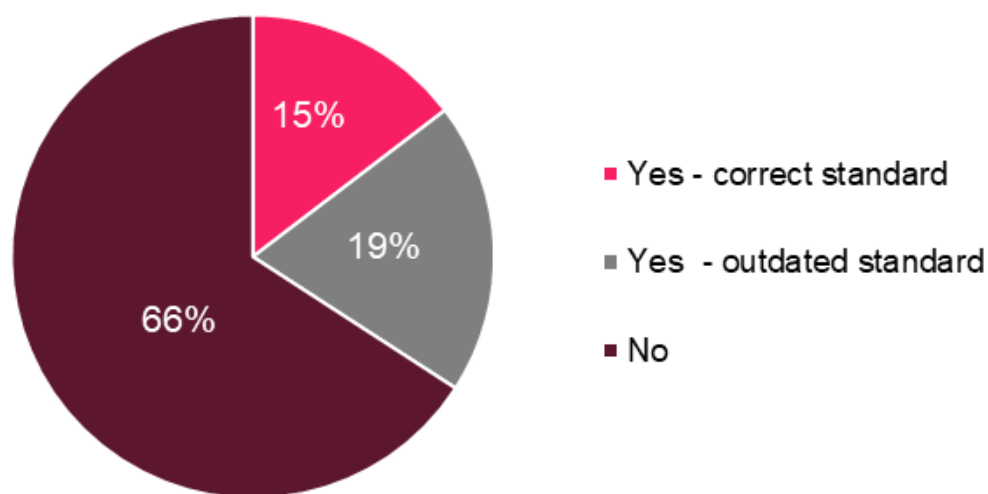


Figure 18:
Overall Comparison of Accessibility Statements

The organisations which referenced the correct standard in their accessibility statement are as follows:

- Public Jobs
- Irish Rail
- Leap Card Top-Up
- PressReader
- Aer Lingus
- British Airways



Industry Comparison

This section focuses on the specific industries included in this report to see if there is any correlation between accessibility and certain types of industries.

Accessibility Pass or Fail

The industry with the highest percentage of pass marks was streaming service apps at 67%, but it should be recalled that those apps are run by American-based companies and are thus subject to US law. Conversely, industries with the lowest percentage of pass marks were social media and takeaway apps at 20% respectively

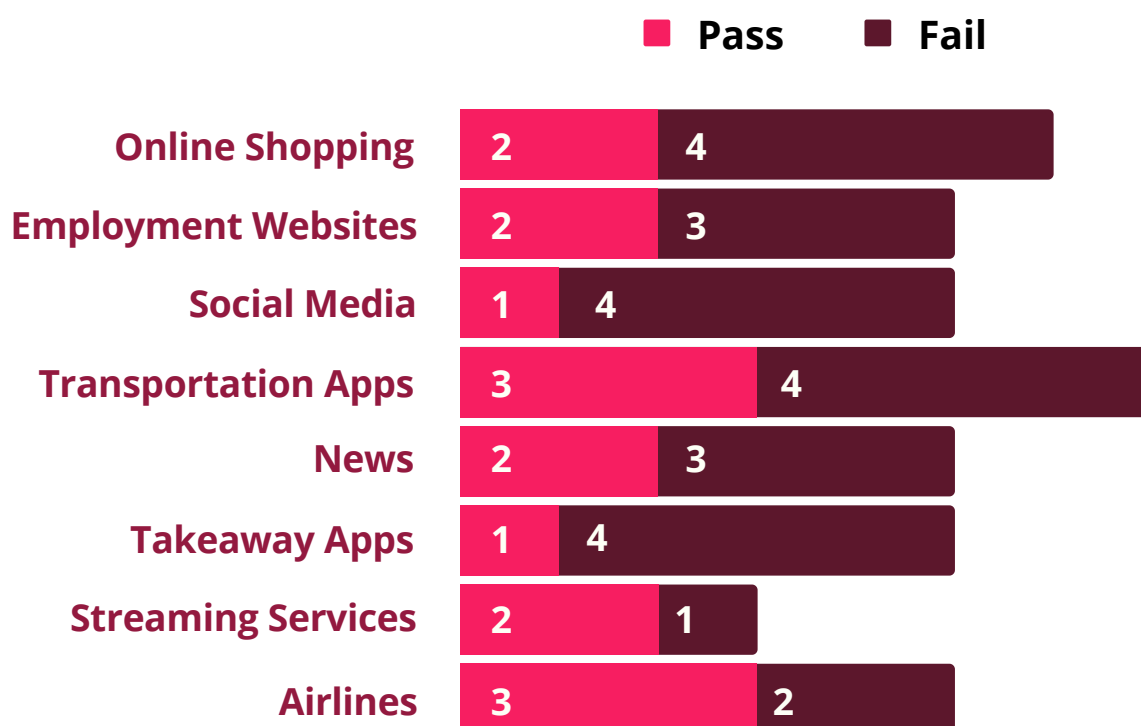


Figure 19:
Industry Comparison of Accessibility



Accessibility Statement

The industry with the highest percentage of accessibility statements referencing the correct standard was airline websites at 40%. Airlines have become more conscious of accessibility in recent years, marked by a rise in the number of options for special assistance on flights and in airports and progress on improving digital access to their services.

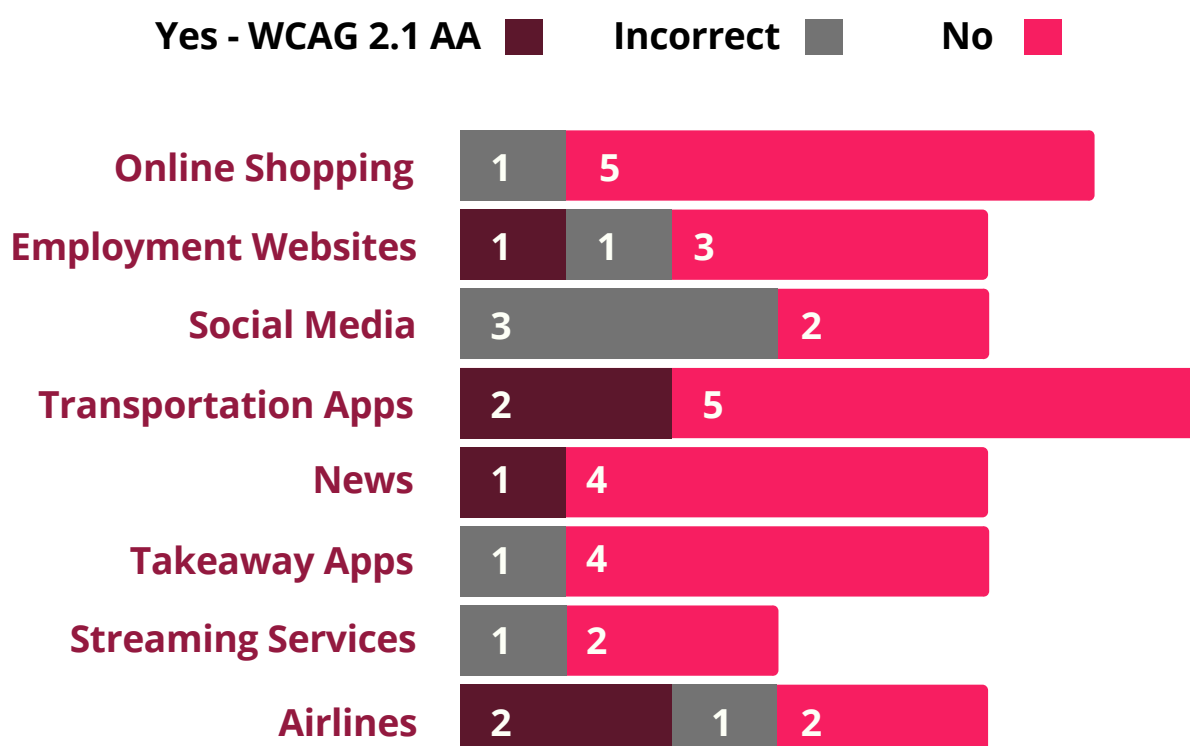


Figure 20:
Industry Comparison of Accessibility Statements





Conclusions



Conclusions

It is easy to take for granted the everyday services provided to us by the internet: we can message our friends, search for jobs, book taxis, watch our favourite shows and movies, order food and drinks, and shop for clothes online. Every one of these services offers us different experiences and choices in how to live our lives.

People with disabilities deserve to have the same opportunities, but this is not currently the case. This report shows the challenges one in eight Irish people face while using technology as part of their day-to-day lives.

Using a standard testing procedure, IA Labs walked through the most important user journeys of different websites and apps to evaluate their accessibility. The findings were mixed: while many of the websites and apps audited as part of this report currently aren't required by law to meet accessibility standards, 39% of them do. Users with disabilities would have no major difficulties independently accessing two of Ireland's most popular streaming services or booking a flight with three of Ireland's top airlines.

However, there is still huge room for improvement. Four of Ireland's top five social media platforms and four of Ireland's five most popular takeaway apps failed IA Labs' accessibility review. Out of six popular clothes retailers operating in Ireland, only two of their websites were deemed usable for people with disabilities. Online shopping and checking social media – two of the most common uses of the internet – are considered part of our daily modern routines, yet have major digital accessibility barriers.



In today's world where digital tools are more and more critical in everyday life, these findings raise serious concerns about the impact inaccessible digital websites and mobile applications can have in prohibiting the full inclusion of people with disabilities in society.

But this report also proves that simple design changes, such as allowing buttons and links to be activated by pressing a key on a keyboard or providing descriptive alt text for images, can make the lives of people with disabilities that small part easier.

We cannot change what we are not aware of. IA Labs are committed to helping public and private sector organisations on their journey towards full digital inclusion. The first step must be raising awareness, and the second step is taking small but concrete steps in improving the accessibility of the websites and apps we use every day.





Appendix



Definition of Disability – by the National Disability Authority

Different definitions of disability are used in different contexts, for example, to set eligibility for particular services or to outlaw discrimination on grounds of disability. There is no definitive list of conditions that constitute a disability. Any such list could leave out people with significant but rare conditions. Many differences exist in terms of how individuals with a particular condition are affected, ranging from mild to severe difficulties. A person's environment, which includes the support they have and the physical or social barriers they face, influences the scale of the challenges they face in everyday life.

The Disability Act 2005 set out the following definition:

“disability”, in relation to a person, means a substantial restriction in the capacity of the person to carry on a profession, business or occupation in the State or to participate in social or cultural life in the State by reason of an enduring physical, sensory, mental health or intellectual impairment.

The Equality Acts (Employment Equality Acts and the Equal Status Acts), which outlaw discrimination on grounds of disability, use a wider definition, and cover past as well as current disability:

"Disability means:

- (a) the total or partial absence of a person's bodily or mental functions, including the absence of a part of a person's body;**
- (b) the presence in the body of organisms causing, or likely to cause, chronic disease or illness;**
- (c) the malfunction, malformation or disfigurement of a part of a person's body;**
- (d) a condition or malfunction which results in a person learning differently from a person without the condition or malfunction; or**
- (e) a condition, disease or illness which affects a person's thought processes, perception of reality, emotions or judgement or which results in disturbed behaviour."**

Census 2011, and other official surveys, used the following definition of disability:

A person with one or more of the following long-lasting conditions or difficulties:

- Blindness or a severe vision impairment
- Deafness or a severe hearing impairment
- An intellectual disability
- A difficulty with learning, remembering or concentrating
- A difficulty with basic physical activities
- A psychological or emotional condition
- A difficulty with pain, breathing, or any other chronic illness or condition



Dates on which the websites were tested

All dates are stated in the DD/MM/YYYY format.

Online Shopping

Index	Website	Date of Audit
1	Primark	28/06/2022
2	Zara	28/06/2022
3	H&M	27/06/2022
4	New Look	17/06/2022
5	River Island	27/06/2022
6	Dunnes Stores	16/08/2022

Employment Websites

Index	Website	Date of Audit
1	Jobs	11/08/2022
2	Public Jobs	11/08/2022
3	Irish Jobs	20/10/2022
4	Jobs Ireland	20/10/2022
5	Recruit Ireland	20/10/2022



Dates on which the websites were tested

All dates are stated in the DD/MM/YYYY format.

Social Media

Index	Social Media App	Date of Audit
1	Facebook	24/06/2022
2	Twitter	05/07/2022
3	Instagram	20/06/2022
4	Pinterest	22/06/2022
5	YouTube	24/06/2022

Transportation Apps

Index	App	Date of Audit
1	Dublin Bus	29/06/2022
2	Luas	29/06/2022
3	Irish Rail	05/07/2022
4	Real Time Ireland	05/07/2022
5	Journey Planner	05/07/2022
6	Leap Card Top-Up	29/06/2022
7	FreeNow	16/08/2022



Dates on which the websites were tested

All dates are stated in the DD/MM/YYYY format.

News

Index	Website	Date of Audit
1	RTÉ News	29/06/2022
2	Irish Times	29/06/2022
3	Newstalk	29/06/2022
4	PressReader	29/06/2022
5	Irish Independent	29/06/2022

Takeaway Apps

Index	App	Date of Audit
1	Just Eat	07/07/2022
2	McDonald's	06/07/2022
3	Too Good To Go	06/07/2022
4	Uber Eats	07/07/2022
5	Deliveroo	06/07/2022



Dates on which the websites were tested

All dates are stated in the DD/MM/YYYY format.

Streaming Services

Index	App	Date of Audit
1	Netflix	30/06/2022
2	Disney+	30/06/2022
3	Amazon Prime	30/06/2022

Airlines

Index	Website	Date of Audit
1	Ryanair	01/07/2022
2	Aer Lingus	04/07/2022
3	British Airways	05/07/2022
4	Norwegian Air	06/07/2022
5	Lufthansa	06/07/2022





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Working for Digital Inclusion

A report by
Inclusion & Accessibility Labs DAC

November 2022

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