



Digital Accessibility Centre

Accessibility Audit Report for HS2 Learning Legacy

Company	HS2
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Standard	WCAG 2.1

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Executive Summary

An accessibility audit for **HS2 Learning Legacy** was carried out by the Digital Accessibility Centre (DAC) user/ technical team on **1st November 2022**.

The **HS2 Learning Legacy** was assessed against the Web Content [Accessibility Guidelines WCAG 2.1](#).

This document incorporates the findings regarding any accessibility barriers identified during the testing process.

The issues reported are examples of any assistive technology barriers which were encountered during accessibility testing, and information has been provided detailing how to resolve them.

Please note: additional instances of these barriers may exist in other pages of the website; wherever these barriers are present, they will also need to be resolved.

A number of accessibility and usability issues were reported by both our automated testing tools and manual user testing team. The access issues reported were found to affect the majority of user groups but most screen reader users. Where validation errors identified by the automated tools did not directly impact on our testing team; it does not mean that they do not have the potential to impact on other users.

Numerous access issues were reported by users who require audio feedback to navigate and interact with page content. For example, some page elements either did not contain discernible text or were not descriptive enough for users to determine their function or purpose. As a result of this some users were unable to confidently interact with those page elements independently. Screen reader users also found difficulty navigating search results due to multiple generic page titles. Some pages contained illogical heading structures and these caused the relationships of content to become conveyed incorrectly. Screen reader users may not feel confident to navigate these pages.

Keyboard-only users were unable to track the order in which some page elements receive focus because they received focus illogically and voice activation users could not activate some elements using their visible label text.

Some of the colour combinations found on the site are low contrast and are likely to be difficult for people with low vision to read. Because people perceive colour and contrast to different degrees, developers must take care to ensure that colour contrast meets the minimum contrast requirements.



Usability comments have been provided by our manual user testing team. These can be found near the end of the report and describe various aspects of the website that, although do not fail to meet the success criteria, could be improved to benefit the overall user experience.



Audit Summary

The website is measured against the Web Accessibility Initiative's (WAI) Web Content Accessibility Guidelines 2.1 (WCAG 2.1) to give accurate feedback on any non-compliant issues.

For the website to be eligible for a Digital Accessibility Centre AA certification, and fall in line with WCAG 2.1 requirements, all A and AA issues must be resolved.

Areas of the website which fail to meet the WCAG 2.1 AAA requirements are not in scope for the purposes of this audit, however, where issues were encountered by our analysts, these have been reported.

We do highly recommend that all issues from the AAA and usability feedback section of the report are also addressed to ensure a fully accessible, usable, and inclusive service.



A

[Label in Name](#)

[No Accessible Name](#)

[Tables](#)

[Table Caption](#)

[Visual Headings](#)

[Audio Description or Media Alternative](#)

[Non-Text Content](#)

[Misused Attribute](#)

[Grouped Form Controls](#)

[Duplicated Page Title](#)

[Meaningful Sequence](#)

[Non-Unique IDs](#)

[Focus Order](#)

[No Visible Label](#)

[Expandable Content](#)

[Non-Descriptive Links](#)



AA

[Non-Descriptive Names](#)

[Colour Contrast \[Text\]](#)

[Text Resize](#)

[Reflow](#)



Scope

Tasks

See [Appendix I](#) for a full list of tasks and instructions



Browser matrix and Assistive Technology (AT) combinations

Desktop

User type	Operating System (OS)	Browser	Assistive Technology
Blind	Windows	Chrome (Latest version)	JAWS 2019 or above
		Chrome (Latest version)	NVDA (Latest version)
Mobility	Windows	Chrome (Latest version)	Dragon Voice Activation v15 or above
Mobility	Windows	Chrome (Latest version)	Keyboard
		Chrome (Latest version)	Keyboard
Deaf	Windows	Chrome (Latest version)	-
Colour Blind/ Dyslexia	Windows	Chrome (Latest version)	-
Low Vision	Windows	Chrome (Latest version)	Screen Magnification Reflow, Text Spacing
		Chrome (Latest version)	Windows Magnifier
		Edge (Latest version)	ZoomText
Cognitive Impaired/ Asperger's/ Anxiety	Windows	Edge (Latest version)	System inverted colours



Mobile/ Tablet

User type	Operating System (OS)	Browser	Assistive Technology
Blind	iOS	Safari (V12 or later)	VoiceOver
	Android	Chrome (Latest version)	TalkBack/ Voice Assistant
Mobility	iOS	Safari (V12 or later)	-
	Android	Chrome (Latest version)	-
Deaf	iOS	Safari (V12 or later)	-
Colour Blind/ Dyslexia	iOS/Android	Safari (V12 or later) / Chrome (Latest version)	-
Low Vision	Android	Chrome (Latest version)	Magnification
	iOS	Safari (V12 or later)	Pinch to Zoom
	iOS/Android	Safari (V12 or later)/ Chrome (Latest version)	System inverted colours



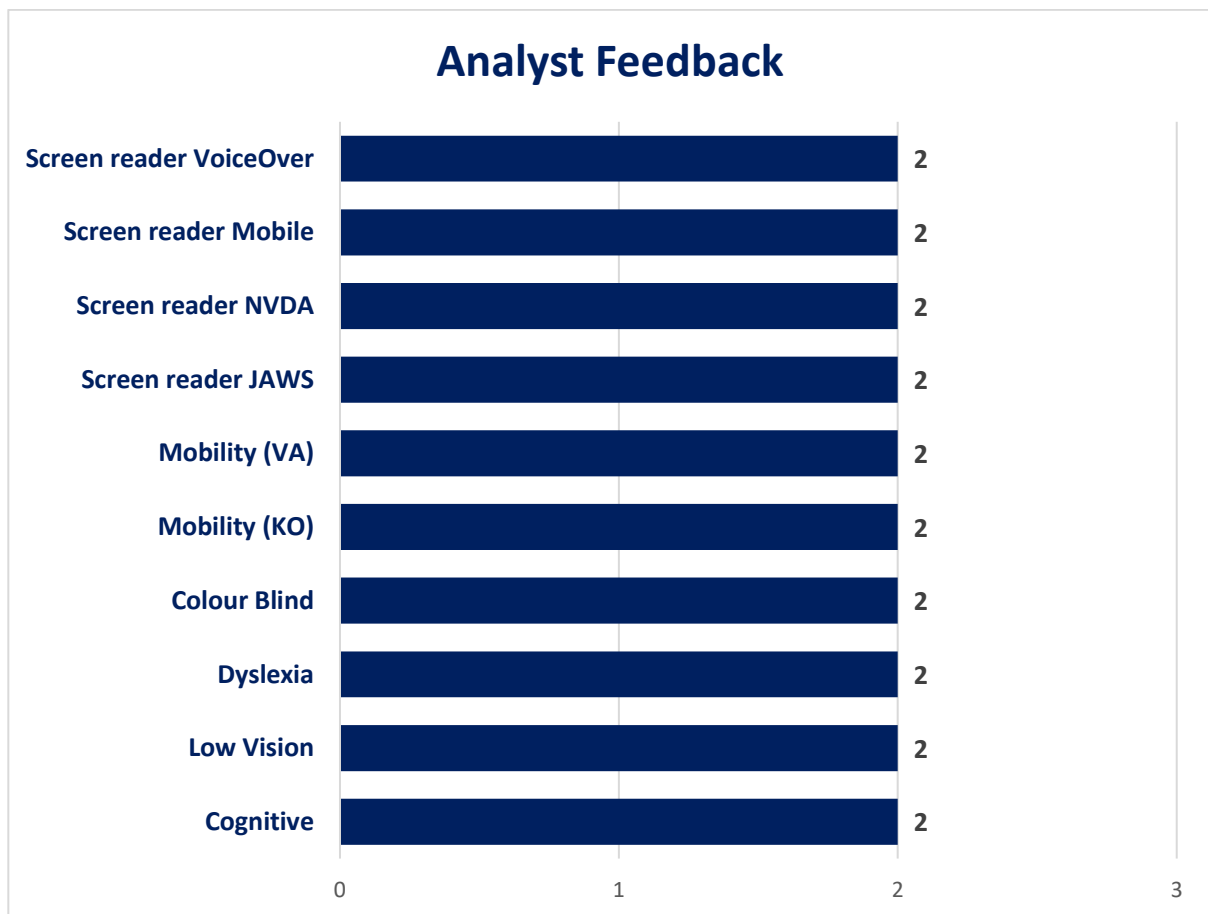
Summary Graphs

Analyst Feedback

Our analysts provided their overall feedback on the website.

This was rated from 0 – could not complete to 3 – Completed independently, no issues.

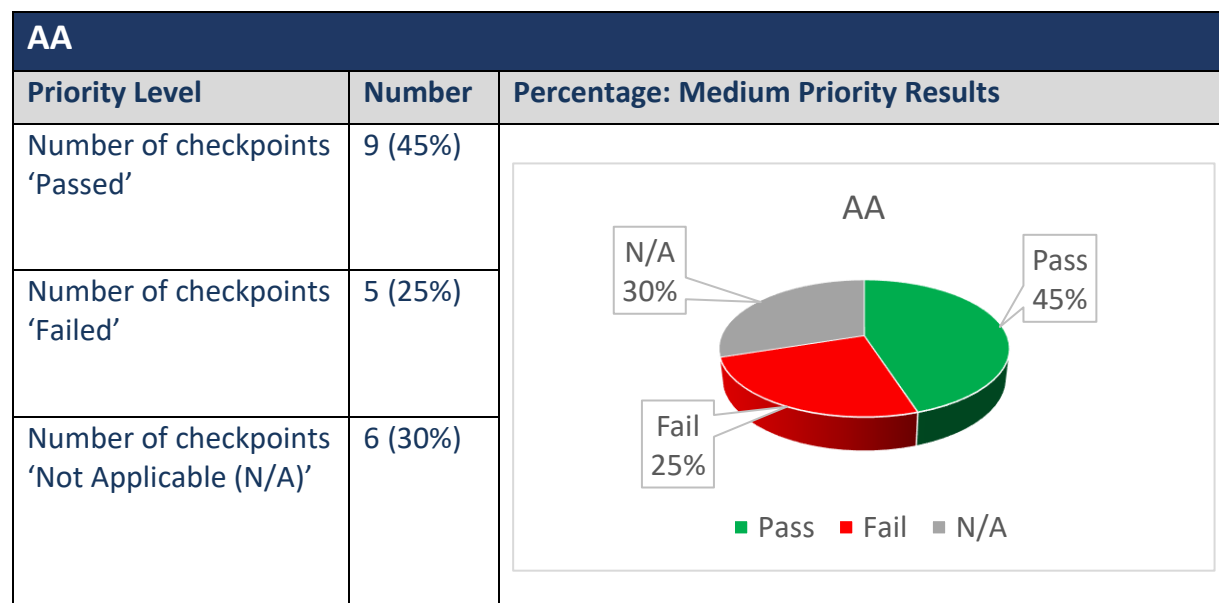
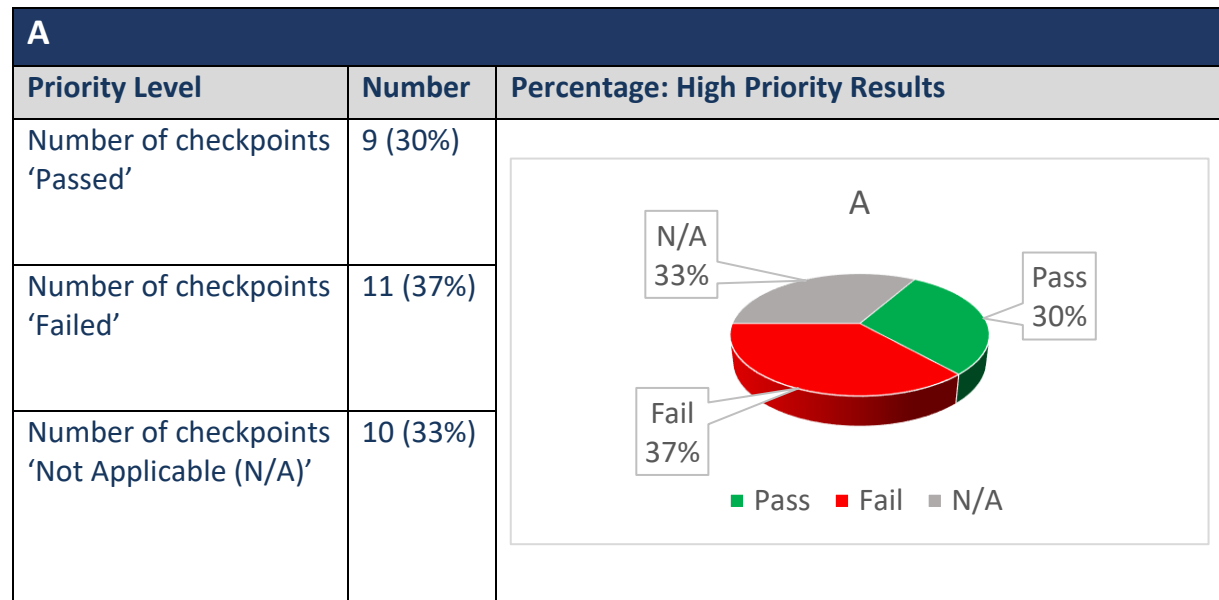
Key:	
0	Could not complete on my own
1	Completed independently but with major issues
2	Completed independently but with minor issues
3	Completed independently, no issues



WCAG 2.1 Breakdown

The graphs below detail the number of checkpoints that passed, failed or were not applicable to the website.

Please refer to the [Classification of Accessibility Issues](#) for more information.



Audit Results

These are the results of the Digital Accessibility Centre accessibility audit organised by A, AA, AAA priorities.

Each area contains a reference to the WCAG 2.1 success criteria, a brief overview of the issue encountered, a description of issues found along with user testing commentaries and solutions.



High Priority WCAG Level A

The following section contains areas that failed to meet WCAG 2.1 A. For the website to fall in line with WCAG 2.1 requirements, all A issues must be resolved.

Label in Name

A string of text that visually named an element was not associated with the element programmatically.

WCAG Reference:

2.5.3 Label in Name (Level A)

[Understanding Label in Name](#) | [How to Meet Label in Name](#)

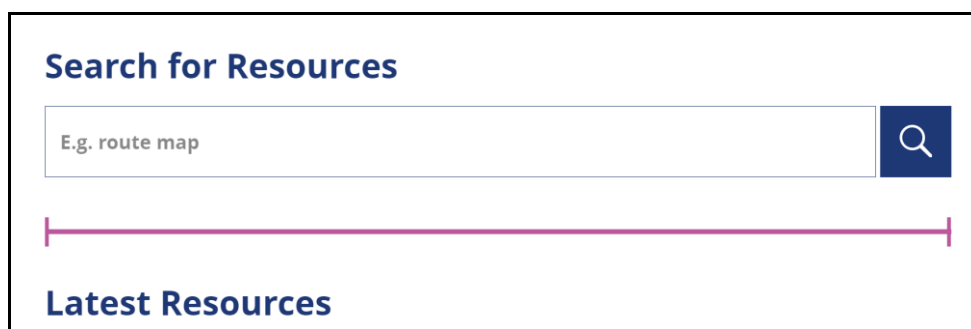
Issue ID: DAC_Label_In_Name_01

URL: <https://learninglegacy.hs2.org.uk/>

Page title: Homepage - HS2 Learning Legacy

Journey: Step 1

Screenshot:



Voice activation users that attempt to activate the 'Search for resources' search input may find that the input does not respond to the users command when the user speaks the visible label 'Search for resources'. The visible string of text 'Search for resources' is not part of the programmatic accessible name. The programmatic accessible name contains different text.

Screen reader users may also become confused if the visible label is not contained within the programmatic accessible name, as it is expected that the 'Search for resources' is read as the part of the programmatic accessible name.

Current code ref(s):

```
#main > article > div > div > form > div > div.input--styled-container.group__item  
<div class="input--styled-container group__item">  
<label for="s" class="field-label screen-reader-text visuallyhidden">Search  
for: </label>
```



```
<input class="field-input searchform__input" type="text" name="s" id="s"
placeholder="E.g. route map" value="">
</div>
```

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.



Solution:

Interactive elements that are visually labelled by text, or an image of text, must have the visible text contained within the programmatic accessible name. Please note that a best practice is to have the text of the label at the start of the name. This ensures that voice activation users can activate interactive elements by speaking the full visible label.

We advise that the visually hidden text is removed, the example text is placed within the markup, and the visible label is connected to the text input.

For example:

```
<div class="input--styled-container group__item">
<label for="s">
<h2 class="heading h1">Search for Resources</h2>
</label>
<span id="searchExample">E.g. route map</span>
<input class="field-input searchform__input" type="text" name="s" aria-
describedby="searchExample" id="s" placeholder="E.g. route map" value="">
</div>
```

An aria-describedby attribute could also provide a better experience for screen reader users as the text input can be described by text.



No Accessible Name

Some form elements did not have a programmatic name.

WCAG Reference:

4.1.2 Name, Role, Value (Level A)

[Understanding Name, Role, Value](#) | [How to Meet Name, Role, Value](#)

Issue ID: DAC_No_Accessible_Name_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:

Find out more

Visit the HS2 website at www.hs2.org.uk and follow us on our social media channels:

<https://twitter.com/HS2Ltd>

<https://www.facebook.com/HS2Ltd>

<https://www.linkedin.com/company/high-speed-two-hs2-ltd>

<https://www.instagram.com/HS2Ltd>

Within the 'Find out more' section, a link is present beneath the Instagram link that does not contain text or another form of providing a programmatic accessible name to screen reader users. This means that screen reader users may not know the purpose of the link. There is also a link without link text positioned after the 'https://twitter.com/HS2Ltd' link.



Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(10)
```

```
<a href="https://www.facebook.com/HS21td" target="_blank" rel="noreferrer  
noopener"><br></a>
```

```
#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(4)
```

```
<a href="https://twitter.com/HS21td  
><br></a>
```

Solution:

A Facebook link is provided to users, and the second 'Facebook' link that does not have a programmatic accessible name may have accidentally been added to the page content. If the second Facebook link is not supposed to be present, we advise that it is removed from the markup. Otherwise, ensure that the link contains descriptive link text.

For example:

```
<a href="https://www.facebook.com/HS21td" target="_blank" rel="noreferrer  
noopener"><br></a>
```

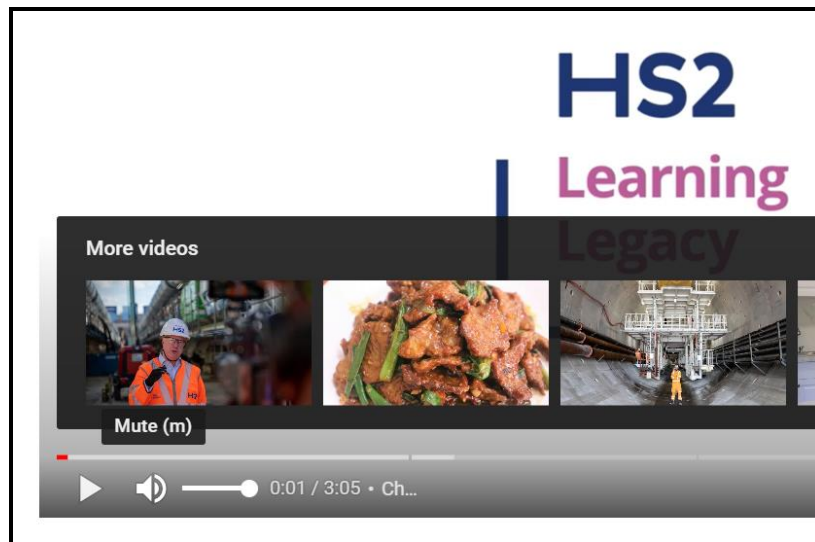


URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



A YouTube video plays information of 'HS2 launches the Learning Legacy project to share insight with the wider UK infrastructure industry'. Users can change the volume by using a volume slider. The volume slider does not contain a programmatically accessible name, and screen reader users may not know the purpose of the slider.

Current code ref(s):

```
#movie_player > div.ytp-chrome-bottom > div.ytp-chrome-controls > div.ytp-left-controls > span > div
```

```
<div class="ytp-volume-panel" role="slider" aria-valuemin="0" aria-valuemax="100" tabindex="0" aria-valuenow="100" aria-valuetext="100% volume">
```

```
[...]
```

```
</div>
```



Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

To ensure that screen reader users know the purpose of the slider that is within the YouTube video player, if possible, the slider must have a programmatic accessible name. A programmatic accessible name can be provided to screen reader users by using an aria-label attribute. If it is not possible to set a programmatic accessible name, we advise contacting the provider and enquiring if a programmatic accessible name can be set.

For example:

```
<div class="ytp-volume-panel" role="slider" aria-valuemin="0" aria-valuemax="100"
tabindex="0" aria-valuenow="100" aria-valuetext="100% volume" aria-label="Video
volume">
[...]
```



Tables

Tables were not implemented correctly.

WCAG Reference:

1.3.1 Info and Relationships (Level A)

[Understanding Info and Relationships](#) | [How to Meet Info and Relationships](#)

Issue ID: DAC_Tables_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:

	Enabling Works Contractors	HS2 Contracts
CSjv	Costain Group PLC; Skanska Construction UK	Area South
Fusion JV	Morgan Sindall Construction & Infrastructure Ltd, BAM Nuttall Limited, Ferrovial Agroman (UK) Limited	Area Central
LMJV	Laing O'Rourke Construction Limited, J Murphy & Sons Limited	Area North

Joint venture organisations delivering the Enabling Works Contracts

Integrated Project Teams (IPTs)	MWCC JVs	DJVs	HS2 Contracts
BBV IPT	Balfour Beatty Group Ltd; Vinci Construction Grands projects; Vinci Construction UK Ltd; Vinci Construction Terrassement	Mott MacDonald; Systra	Lots N1 and N2 (Area North including Long Itchington Wood Green Tunnel to Delta Junction and Birmingham Spur and the Delta Junction to the West Coast Main Line (WCML) tie-in)
			Lots C2 and C3



Screen reader users that are navigating the 'About the HS2 Programme - HS2 Learning Legacy' contents can find more than one table is present. Each table is not marked up correctly to convey the table relationships to screen reader users. Table headers are not announced, whilst the user is navigating the table using table navigation. This is because the <th> tag is not used for table headers.

Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > figure:nth-child(32) > table
```

```
<table>
<tbody>
<tr>
<td>
<strong>&nbsp;</strong>
</td>
<td>
<strong>Enabling Works Contractors</strong>
</td>
<td>
<strong>HS2 Contracts</strong>
</td>
</tr>
[...]
```

```
#main > article > div > div > div > div.document__main__content > figure:nth-child(39) > table
```

```
<table>
<tbody>
<tr>
<td>
<strong>Integrated Project Teams (IPTs)</strong>
</td>
[...]
```

Screen reader comments:

"When interrogating the tables on this page, I could not locate headings at the start of each row or column.

It is important to have headings present within a table as the Headers describe what each column or row contains. Not having this will aid confusion for the service user as the content of these tables are not made clear.

Adding headings would enable a much more informative browsing experience when exploring the tables within this service."



Solution:

Ensure that each table is checked to convey the correct information and relationships to screen reader users. Table headers should be marked up using the <th> tag and include a scope attribute of col or row.

To ensure that the purpose of table headers is presented to screen reader users, the structure of this information can be reflected within the mark-up by making use of the <th> element.

For example:

```
<table>
<tbody>
<tr>
<td>
<strong>&nbsp;</strong>
</td>
<th scope="col">
<strong>Enabling Works Contractors</strong>
</th>
<th scope="col">
<strong>HS2 Contracts</strong>
</th>
</tr>
[...]
```



Table Caption

Table captions are not programmatically associated for data tables.

WCAG Reference:

1.3.1 Info and Relationships (Level A)

[Understanding Info and Relationships](#) | [How to Meet Info and Relationships](#)

Issue ID: DAC_Table_Captions_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:

	Enabling Works Contractors	HS2 Contracts
CSjv	Costain Group PLC; Skanska Construction UK	Area South
Fusion JV	Morgan Sindall Construction & Infrastructure Ltd, BAM Nuttall Limited, Ferrovial Agroman (UK) Limited	Area Central
LMJV	Laing O'Rourke Construction Limited, J Murphy & Sons Limited	Area North

Joint venture organisations delivering the Enabling Works Contracts

Tables on the page have a caption that are not programmatically associated. Captions are a table identifier and act like a title or header for the table content. This helps users understand the information that is contained within the data table.



Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > figure:nth-child(32)
<figure class="wp-block-table">
<table>
<tbody>
<tr>
<td>
<strong>&nbsp;</strong>
</td>
<td>
<strong>Enabling Works Contractors</strong>
</td>
[...]
```

Screen reader comments:

"Using the JAWS hot key 'T' to interact with the 6 tables on this service, I noted that all of the tables did not possess a caption.

It is important for tables to have a caption associated with the table. This is because a caption is a piece of text which describes the purpose of the table; and not having this does not enlighten the service user on the intention or the subject of the table.

It would be helpful for service users if captions were added to the tables on this page, otherwise time could be wasted trying to read all the tables unnecessarily."

Solution:

Ensure that captions that are present in the presentation are programmatically associated to the table data that they introduce. We advise that the figure tags be removed and a caption tag is used to introduce the table content.

For example:

```
<figure class="wp-block-table">
<table>
<caption>Joint venture organisations delivering the Enabling Works
Contracts</caption>
<tbody>
<tr>
<td>
<strong>&nbsp;</strong>
</td>
<td>
<strong>Enabling Works Contractors</strong>
</td>
[...]
```



Visual Headings

Visual headings were found, but they were not marked up with a semantic heading tag. Screen reader users may be unaware that these introduce content.

WCAG Reference:

1.3.1 Info and Relationships (Level A)

[Understanding Info and Relationships](#) | [How to Meet Info and Relationships](#)

Issue ID: DAC_Visual_Headings_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/#11>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:

Phase One Main Works Stations Contractors (MWSC)

Phase One Stations is made up of four stations and an automated people mover, which is described below.

Euston

HS2's London terminus integrates high-speed rail connections with conventional rail. High-speed trains will eventually increase the number of

Old Oak Common

This 14-platform rail super-hub in west London features six platforms for HS2 and eight platforms for conventional services, with connections to the Elizabeth Line, the Heathrow Express and the Great Western Mainline. HS2 Ltd is working with the Old Oak and Park Royal Development Corporation (OPDC) on an ambitious vision for the surrounding area – the largest regeneration project in London.

Interchange

Interchange is a four-platform 'through' station with links to Birmingham



Beneath the heading level three 'Phase One Main Works Stations Contractors (MWSC)', bold text is present and introduces details on the locations where stations could be built. The bold text is not marked up using a semantic heading. Screen reader users may be unaware that the text is a heading and introduces content.

Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > p:nth-child(42)
<p>
<strong>Euston</strong>
</p>
```

```
#main > article > div > div > div > div.document__main__content > p:nth-child(44)
<p>
<strong>Old Oak Common</strong>
</p>
```

Solution:

We recommend that any bold text similar to 'Euston' and introduces content is marked up to be a semantic heading at a logical level. In this instance, we advise that the text be a heading level four.

For example:

```
<p>
<h4>Euston</h4>
</p>
```



Audio Description or Media Alternative

An alternative for pre-recorded video content was not provided.

WCAG Reference:

1.2.3 Audio Description or Media Alternative (Pre-recorded) (Level A)

[Understanding Audio Description or Media Alternative \(Pre-recorded\)](#) |

[How to Audio Description or Media Alternative \(Pre-recorded\)](#)

1.2.5 Audio Description (Prerecorded) (Level AA)

[Understanding Audio Description \(Prerecorded\)](#) | [How to Meet Audio Description \(Prerecorded\)](#)

1.2.8 Media Alternative (Pre-recorded) (Level AAA)

[Understanding Media Alternative \(Pre-recorded\)](#) |

[How to Meet Media Alternative \(Pre-recorded\)](#)

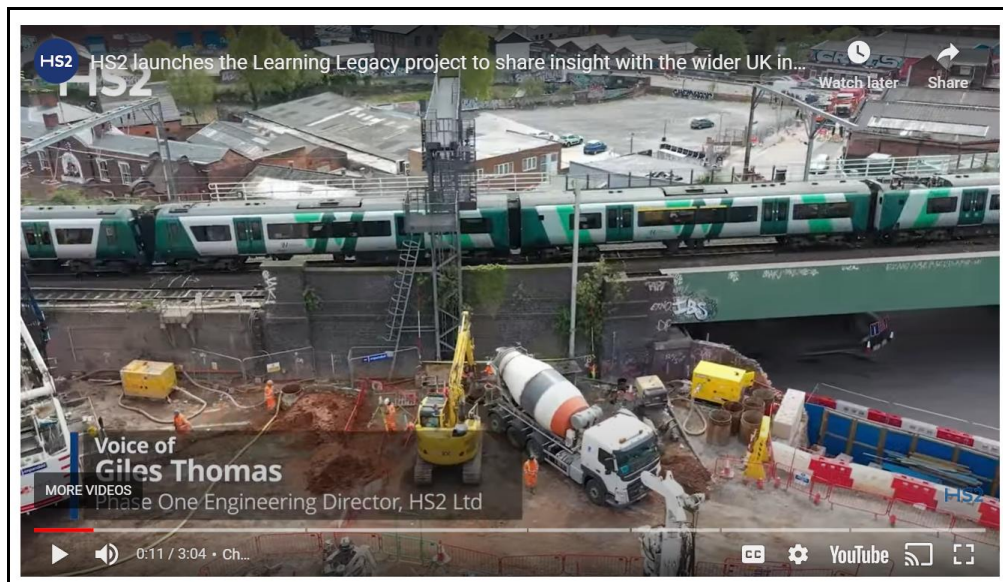
Issue ID: DAC_Audio-Description_Or_Media_Alternative_01

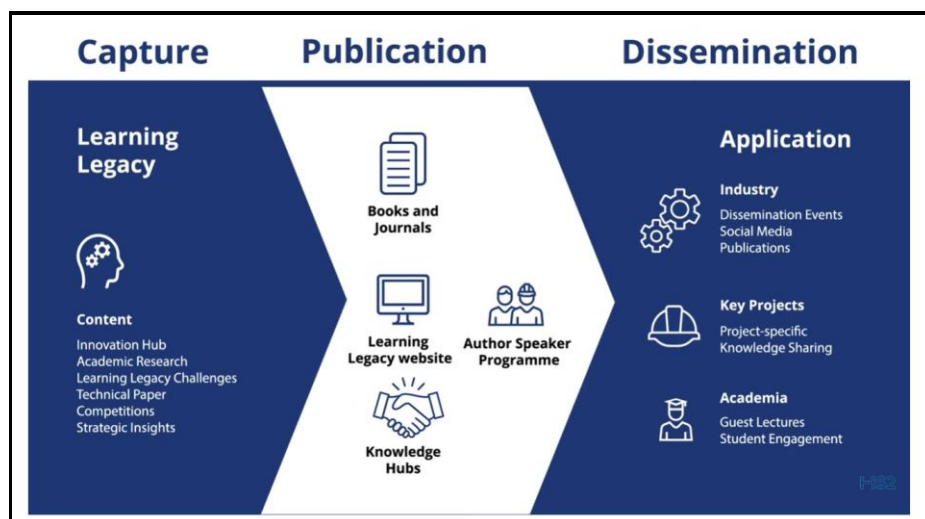
URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:





Viewing the video HS2 'launches the Learning Legacy project to share insight with the wider UK infrastructure industry', there are multiple instances where speakers are introduced visually and there is no audio announcement for blind users. At 0:30 there is more information present that is no announced for blind users. Blind users may be unaware of the information shown in the video.

Current code ref(s):

#widget2

```
<iframe loading="lazy" title="HS2 launches the Learning Legacy project to share insight with the wider UK infrastructure industry" width="500" height="281" src="https://www.youtube.com/embed/On-83x6-vcE?feature=oembed" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture" allowfullscreen="" enablejsapi="true" nuan_newframe="true" id="widget2"></iframe>
```

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.



Solution:

Ensure an audio description is available to describe video content to blind users. An audio description should provide, for example, information about actions, characters, scene changes, and on-screen text that are important and are not described or spoken in the main soundtrack.

Also consider a media alternative which provides all of the information within the video in text. Note, this will meet the A standard, but to achieve the AA standard, audio description is still required.



Non-Text Content

There is non-text content that does not have an appropriate alternative for screen reader users.

WCAG Reference:

1.1.1 Non-text Content (Level A)

[Understanding Non-text Content](#) | [How to Meet Non-text Content](#)

1.3.1 Info and Relationships (Level A)

[Understanding Info and Relationships](#) | [How to Meet Info and Relationships](#)

Issue ID: DAC_Non_Text_Content_01

URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



An image is present below the 'Industry Partners' heading and it shows multiple logos of industries. There is no appropriate alternative text to convey the industry partners to blind users. Blind users may be unaware who the partners are for HS2.

Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > figure:nth-child(25) > img

```

Solution:

We recommend that an unordered list is provided below the image that can provide the information of industry partners to blind screen reader users. The image of the industry logos can remain to be hidden from screen reader users if an alternative is provided.

For example:

```
<ul>
<li>The Society of Occupational Medicine (Supporting occupational health and
wellbeing professionals)</li>
<li>Railway Industry Association (The voice of the UK rail supply community)</li>
[...]
```

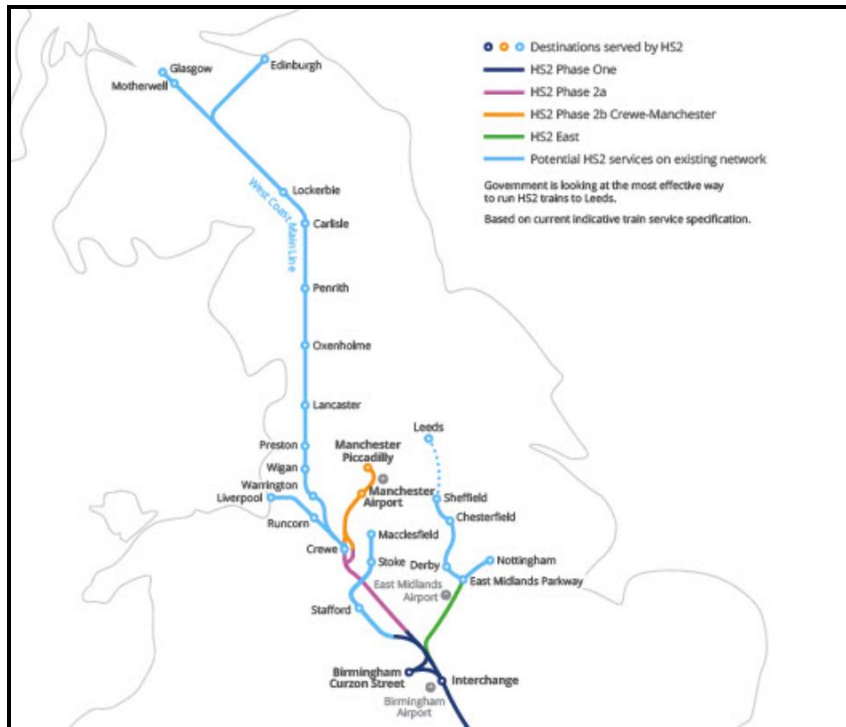


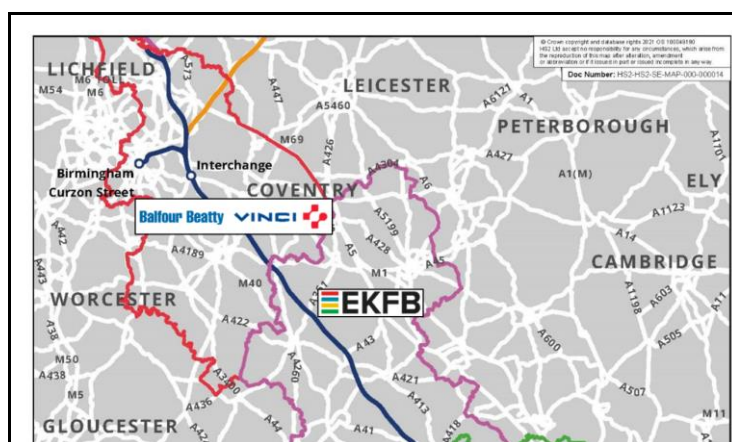
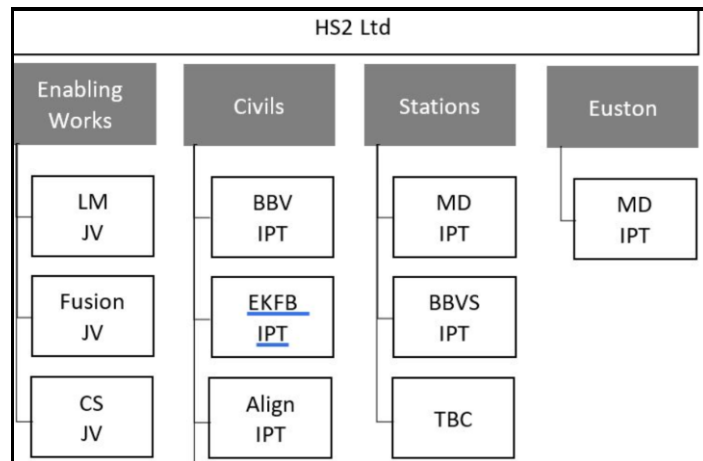
URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:





Information is conveyed through the use of images. The images contain text that is not accessible to assistive technology users. There is no alternative present on the page that screen reader users can navigate to which conveys the information contained within the images. This means that screen reader users may be missing beneficial information.



Current code ref(s):

#main > article > div > div > div > div.document__main__content > figure.wp-block-image.size-full > img

```

```

#main > article > div > div > div > div.document__main__content > figure:nth-child(25) > img

```

```



```
#main > article > div > div > div > div.document__main__content > figure:nth-child(38) > img

```

Solution:

We advise that information of HS2 trainlines are not provided through images of text alone. If it is possible, redesign the trainline information to be provided by HTML and CSS markup. If it is not possible, there must be adjacent text to the images of text that provide the information in an alternative format, such as text. The alt of the image can tell the user where to find the alternative text.

For example:

```

```



Misused Attribute

An attribute for an element is misused. Assistive technology may read the markup incorrectly and cause random results for users.

WCAG Reference:

4.1.2 Name, Role, Value (Level A)

[Understanding Name, Role, Value](#) | [How to Meet Name, Role, Value](#)

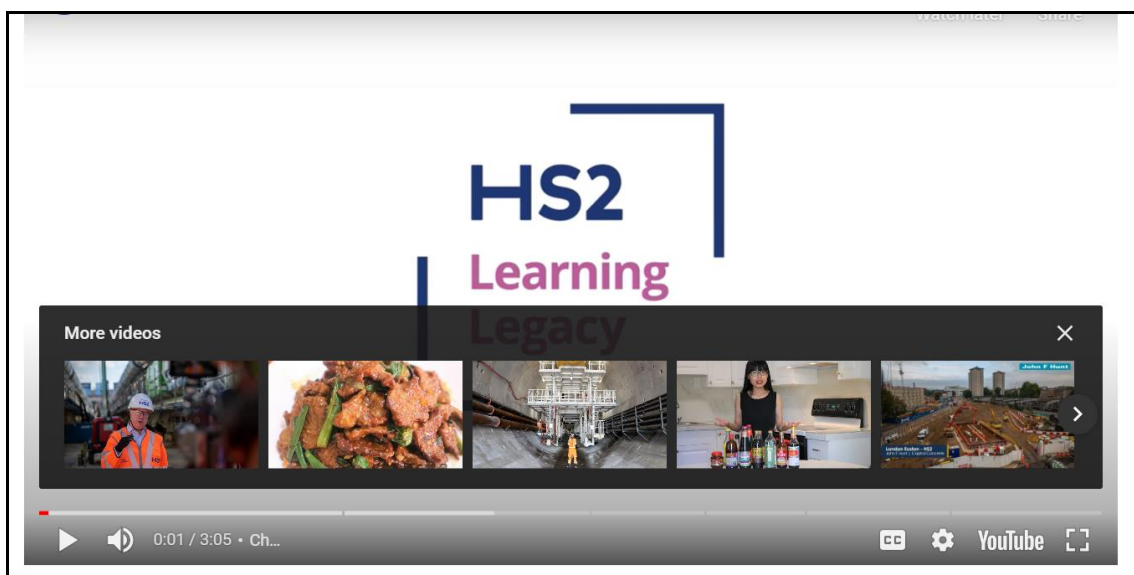
Issue ID: DAC_Misused_Attribute_01

URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



The YouTube player uses an aria-label attribute on elements that is not widely supported for an aria-label attribute. This could potentially cause issues for assistive technology reading the markup and may cause content to be conveyed incorrectly.



Current code ref(s):

#movie_player

```
<div class="html5-video-player ytp-exp-bottom-control-flexbox ytp-title-enable-  
channel-logo ytp-embed ytp-embed-playlist ytp-large-width-mode ytp-fit-cover-video  
paused-mode ytp-expand-pause-overlay ytp-probably-keyboard-focus" tabindex="-1"  
id="movie_player" data-  
version="/s/player/03bec62d/player_ias.vflset/en_US/base.js" aria-label="YouTube  
Video Player">  
[...]  
</div>
```

#movie_player > div.ytp-chrome-bottom > div.ytp-chrome-controls > div.ytp-left-controls >
div.ytp-chapter-container > button > div.ytp-chapter-title-content

```
<div class="ytp-chapter-title-content" title="View chapter" aria-label="View  
chapter">Chapters</div>
```

Solution:

To ensure that the potential of content being misread or conveyed incorrectly by assistive technology, we recommend that the aria-label attribute is removed from the div elements. An aria-label is only useful for elements that have a role attribute.

For example:

```
<div class="html5-video-player ytp-exp-bottom-control-flexbox ytp-title-enable-  
channel-logo ytp-embed ytp-embed-playlist ytp-large-width-mode ytp-fit-cover-video  
paused-mode ytp-expand-pause-overlay ytp-probably-keyboard-focus" tabindex="-1"  
id="movie_player" data-  
version="/s/player/03bec62d/player_ias.vflset/en_US/base.js" aria-label="YouTube  
Video Player">  
[...]  
</div>
```



Grouped Form Controls

Information, structure, and relationships conveyed through presentation were not programmatically determined or available in text.

WCAG Reference:

1.3.1 Info and Relationships (Level A)

[Understanding Info and Relationships](#) | [How to Meet Info and Relationships](#)

Issue ID: DAC_Grouped_Form_Controls_01

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:

Filters

Apply Filters

Resource types +

Communications and Engagement +

Consents and Powers -

- ☐ All in this theme
- ☐ Authorisations Process
- ☐ Environmental Consents
- ☐ Pre-application Consultation
- ☐ Town Planning and Heritage

A filter section is provided to users to filter search results. Visually, the filter checkboxes for each expanding accordion are grouped. Screen reader users may not know that the checkboxes are related to the same accordion as there is no programmatic grouped announcement for the checkboxes.



Current code ref(s):

#search-filters__inner > div

```
<div class="field-group checkbox-group search-field-group">
<h3 class="heading js-heading">
<button type="button" class="button button--ghost" data-collapsible="" aria-
expanded="true">Resource types</button>
</h3>
<ol class="nav themes-filter-list resource-type-filter-list" aria-
hidden="false"><li>
<label for="filter-theme-all">
<input type="checkbox" data-all-checkbox-selector="true" class="input--checkbox"
checked="" name="resource_type[]" id="filter-theme-all" value="">
[...]
```

Solution:

Ensure that visually grouped form elements are also grouped programmatically. This ensures that screen reader users are aware of the relationship between form elements.

For example:

```
<fieldset>
<legend>What's your favourite colour?</legend>
<div>
<label for="1blue">Blue</label>
<input type="radio" name="colour" id="1blue" value="blue">
<label for="1green">Green</label>
<input type="radio" name="colour" id="1green" value="green">
</div>
</fieldset>
```

See [Grouping Controls](#) for an example on grouping form components.



Duplicated Page Title

There are page titles which are duplicated on multiple pages.

WCAG Reference:

2.4.2 Page Titled (Level A)

[Understanding Page Titled](#) | [How to Meet Page Titled](#)

Issue ID: DAC_Duplicated_Page_Title_01

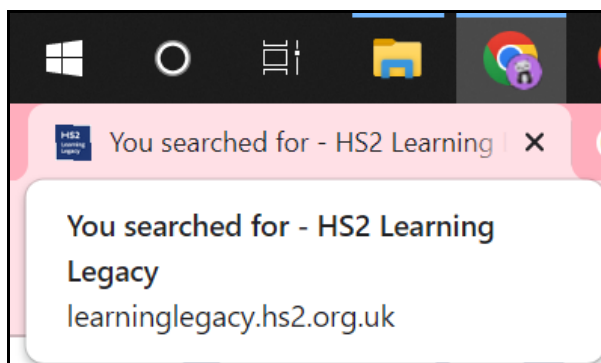
URL:

https://learninglegacy.hs2.org.uk/?s=&resource_type%5B%5D=439&resource_type%5B%5D=442&orderSearchBy=relevance

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:



Applying the selected filters of the search results causes a new search results page to load. It may not be clear to screen reader users that the page results have updated, as the page title is unchanged. The page title is essential for screen reader users to know that results have updated.

Current code ref(s):

head > title

```
<title>You searched for - HS2 Learning Legacy</title>
```



Examples of additional instances:

URL: https://learninglegacy.hs2.org.uk/authors/?author_name_param=Robert+alberola

Page title: Authors Archive - HS2 Learning Legacy

Journey: Step 9, a

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

Once the user submits their chosen filters, the page title should update to reflect the results that are present. We advise that the number of search results is added to the page title as this can ensure screen reader users are aware that results have updated.

For example:

```
<title>You searched for - HS2 Learning Legacy 25 results</title>
```



Meaningful Sequence

Content is not navigated onto correctly and results in a meaning that is different from the visual reading order.

WCAG Reference:

1.3.2 Meaningful Sequence (Level A)

[Understanding Meaningful Sequence](#) | [How to Meet Meaningful Sequence](#)

2.4.3 Focus Order (Level A)

[Understanding Focus Order](#) | [How to Meet Focus Order](#)

Issue ID: DAC_Meaningful_Sequence_01

URL: <https://learninglegacy.hs2.org.uk/document-themes/consents-powers/>

Page title: Consents and Powers Archives - HS2 Learning Legacy

Journey: Step 6

Screenshot:



Sighted users that use screen reading software to enhance their reading ability in conjunction with magnification may be confused when the reading order skips around on the screen. The 'Published on' information for each article text is read after the article because the text is positioned by the use of CSS properties. Additionally, blind users that are receiving sighted supported are reading content in a different order than the visual layout. This could cause the blind user and the sighted user to become confused when the order of content is in different orders.



Current code ref(s):

#post-7046 > article > p

```
<p class="document--card__published">
<strong>Published on</strong>
<time datetime="2022-04-13">
13 April 2022
</time>
</p>
```

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document-themes/communications-engagement/>

Page title: Communications and Engagement Archives - HS2 Learning Legacy
Journey: Step 7

URL: <https://learninglegacy.hs2.org.uk/document-themes/design-engineering-architecture/>

Page title: Design, Engineering and Architecture Archives - HS2 Learning Legacy
Journey: Step 8

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

We advise that the CSS markup for the published date text does not cause a reading sequence issue for users of screen reading software. The published date text should follow the DOM order, and this will ensure that readers receive the correct order of content.



Non-Unique IDs

Non-unique IDs were present and this may cause issues for assistive technology users.

WCAG Reference:

4.1.1 Parsing (Level A)

[Understanding Parsing](#) | [How to Meet Parsing](#)

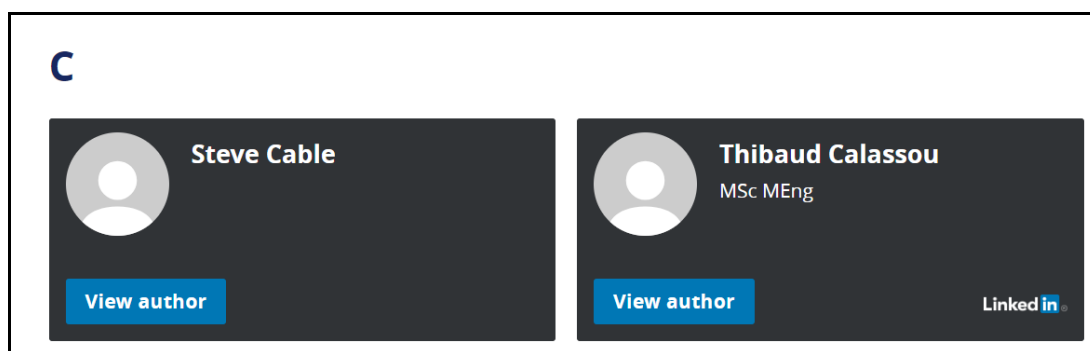
Issue ID: DAC_Non_Unique_Ids_01

URL: <https://learninglegacy.hs2.org.uk/authors/#author-surname-heading--Z>

Page title: Authors Archive - HS2 Learning Legacy

Journey: Step 9

Screenshot:



The letter 'C' that is used to identify surnames ending with the letter C has an ID attribute. The value of the ID attribute has been used more than once. This could potentially be problematic for assistive technology as an ID is a unique identifier. Assistive technology could mismatch information or read information incorrectly.

Current code ref(s):

#author-surname-heading—C

```
<h3 class="heading h3 authors-surname-heading" id="author-surname-heading--C"><span class="visuallyhidden">Authors whose surnames being with: </span>C</h3>
```

#author-surname-heading--c

```
<h3 class="heading h3 authors-surname-heading" id="author-surname-heading--C"><span class="visuallyhidden">Authors whose surnames being with: </span>C</h3>
```

Solution:

IDs must have unique values. This ensures that content can be parsed correctly by assistive technology. If an ID is not unique it may cause content to be conveyed incorrectly to screen reader users.



Focus Order

The order in which some interactive elements receive focus is not logical or correct.

WCAG Reference:

2.4.3 Focus Order (Level A)

[Understanding Focus Order](#) | [How to Meet Focus Order](#)

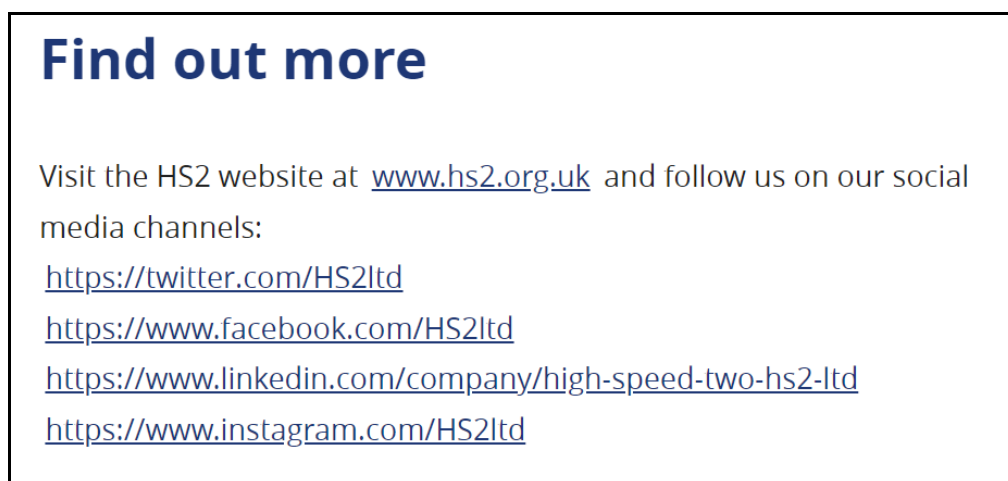
Issue ID: DAC_Focus_Order_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/#main>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:



Keyboard-only users that navigate past the links 'https://twitter.com/HS2Ltd' and 'https://www.instagram.com/HS2Ltd', that are within the 'Find out more' section, can navigate onto a nonvisible link situated after the links. It may be confusing to some keyboard-only users that keyboard-only focus can move to a blank area of the page.

Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(4)
```

```
<a href="https://twitter.com/HS2Ltd"><br></a>
```

```
#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(10)
```

```
<a href="https://www.facebook.com/HS2Ltd" target="_blank" rel="noreferrer noopener"><br></a>
```



Keyboard-only comments:

“There is an abnormal focus on the Twitter and Instagram links, shown in the screenshot, the focus lands on an invisible element. The element can be actioned and leads to the same destination, but I was still unaware of what it was I was actioning initially. I would always expect to know what my focus is on.”

Solution:

It appears that the additional links that are positioned after the ‘https://twitter.com/HS2Ltd’ and ‘https://www.instagram.com/HS2Ltd’ links has been accidentally added to the page content. We advise that the links are removed from the markup to ensure that keyboard-only users do not become confused when their focus moves onto a blank area.

For example:

```
<a href="https://twitter.com/HS2Ltd  
><br></a>
```



No Visible Label

A label was not visible for elements that require user inputs. Users may not know the purpose of the element.

WCAG Reference:

3.3.2 Labels or Instructions (Level A)

[Understanding Labels or Instructions](#) | [How to Meet Labels or Instructions](#)


Issue ID: DAC_No_Visible_Label_01

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:



The screenshot shows a search interface. At the top left, the word 'rces' is partially visible. Below it is a search bar. To the right of the search bar is a blue square button with a white magnifying glass icon. Below the search bar, it says 'Showing 1 - 30 of 143 results'. To the right of this text is a dropdown menu labeled 'Relevance' with a downward arrow.

The purpose of the 'Relevance' select element may not be obvious to many visual user groups. There is no visible label present that can tell the user that the select element is to sort the results present. Users may not know what they will be selecting.

Current code ref(s):

#orderDropdown

```
<select name="orderSearchBy" id="orderDropdown" aria-label="Search results order:">
  <option value="relevance" selected="selected">Relevance</option>
  <option value="titleAsc">Title ascending</option>
  <option value="titleDesc">Title descending</option>
  <option value="dateAsc">Publish date ascending</option>
  <option value="dateDesc">Publish date descending</option>
</select>
```



Voice activation comments:

"I found the only way I could select the drop-down menu labelled (Relevance) was by using the command 'Click Box', I would have expected to have been able to use label by name as well."

Solution:

Where users can interact with inputs there must be a visible label present that tells the user the purpose of each input. This can ensure that users are aware of the purpose of the select element. We advise that a label tag is used and that it is programmatically associated by using the for and id attributes.

For example:

```
<label for="orderDropdown">Search results order</label>
<select name="orderSearchBy" id="orderDropdown" aria-label="Search results order:-">
<option value="relevance" selected="selected">Relevance</option>
<option value="titleAsc">Title ascending</option>
<option value="titleDesc">Title descending</option>
<option value="dateAsc">Publish date ascending</option>
<option value="dateDesc">Publish date descending</option>
</select>
```



Expandable Content

The state of content that can be expanded or collapsed is not announced to screen reader users.

WCAG Reference:

4.1.2 Name, Role, Value (Level A)

[Understanding Name, Role, Value](#) | [How to Meet Name, Role, Value](#)

Issue ID: DAC_Expandable_Content_01

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:



Screen reader users that are navigating the site using a mobile device will notice that the 'Show filters' button does not announce an expanded or collapsed state. This potentially means that screen reader users are unaware that additional content can be displayed or hidden.

Current code ref(s):

#search-filters-toggle

```
<button class="search-filters-toggle" id="search-filters-toggle">Show filters</button>
```



Solution:

Content that can be expanded or collapsed must announce an expanded or collapsed state. An expanded or collapsed state can be announced by using an aria-expanded attribute with a value of true or false.

For example:

```
<button class="search-filters-toggle" id="search-filters-toggle" aria-expanded="false">Show filters</button>
```



Non-Descriptive Links

Links were found that did not have a distinct meaning and leaving screen reader users unable to determine the link's purpose.

WCAG Reference:

2.4.4 Link Purpose (In Context) (Level A)

[Understanding Link Purpose \(In Context\)](#) | [How to Meet Link Purpose \(In Context\)](#)

2.4.9 Link Purpose (Link Only) (Level AAA)

[Understanding Link Purpose \(Link Only\)](#) | [How to Meet Link Purpose \(Link Only\)](#)

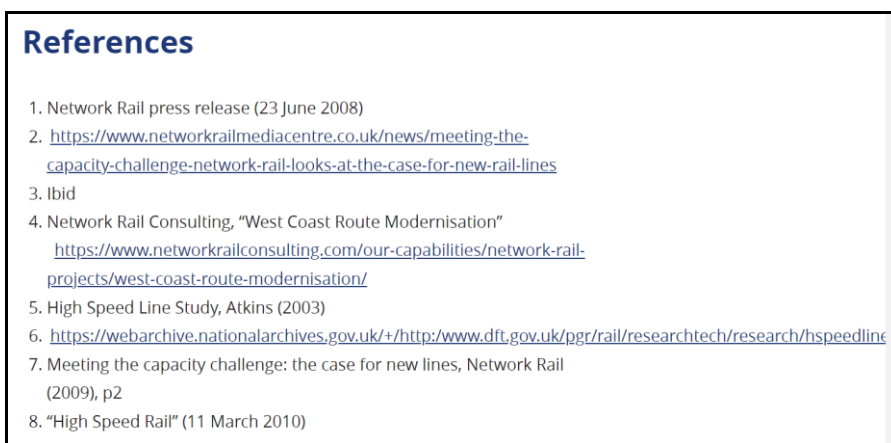
Issue ID: DAC_Non_Descriptive_Links_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:



Screen reader users can find links below the 'References' heading that contain the URL as the links text. Often, URL text can be difficult for the user to understand the destination of the link as it does to provide descriptive text. Short URLs can be acceptable, if the purpose of the link can be understood by the URL text. Long URLs are increasingly difficult as these often include symbols and many numbers.



Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > ol > li:nth-child(2) > a  
<a href="https://www.networkrailmediacentre.co.uk/news/meeting-the-capacity-  
challenge-network-rail-looks-at-the-case-for-new-rail-  
lines">https://www.networkrailmediacentre.co.uk/news/meeting-the-capacity-  
challenge-network-rail-looks-at-the-case-for-new-rail-lines</a>
```

```
#main > article > div > div > div > div.document__main__content > ol > li:nth-child(6) > a  
<a href="https://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/rail/r  
esearchtech/research/hspeedlinestudysummaryreport.pdf">https://webarchive.national  
archives.gov.uk/+http://www.dft.gov.uk/pgr/rail/researchtech/research/hspeedlinest  
udysummaryreport.pdf</a>
```

Screen reader comments:

“Accessing the links on the about screen using VoiceOver, might cause some confusion for users who choose to view only the links within the page at the time of testing. Currently many links contain a URL address instead of clear link text, which means that it is not possible for users to identify the destination page or function of the link.

Including a clear link text to identify the destination page or function of each link, will make the content easier to identify in the future.

Whilst tabbing through this page using the ‘Tab key I located 10 URL’s: I activated the first URL to see exactly where I would be taken as it was not made clear.

The first URL: ‘https://www.networkrailmediacentre.co.uk/news/meeting-the-capacity-challenge-network-rail-looks-at-the-case-for-new-rail-lines,’ took me to ‘Network Rails’ MEETING THE CAPACITY CHALLENGE:’ page.

It would be time consuming for myself and other service users to go through each URL: in turn to discover where they would take the user.

This is unnecessary content as the URL’s: do not need to be included.

Removal of the URL’s: and replacing it with link text would assist on making this part of the service more comprehensive instead of finding other methods to understand why these URL’s are present and where they would take a service user if activated.”

Solution:

It is recommended that long URLs are avoided to be used as link text. Instead, set the content of the link to be descriptive for the purpose of the link. If the link directs the user to a PDF document, then we also advise that the file size and type is included in the links content.



URL: <https://learninglegacy.hs2.org.uk/authors/roberto-alberola/>

Page title: Roberto Alberola - HS2 Learning Legacy

Journey: Step 9, a

Screenshot:



Users can visit the LinkedIn profile page of Roberto Alberola by clicking the 'View LinkedIn profile' link that is present on the page. Screen reader users may not know the purpose of the link until the user activates the link, as the link text does not describe its destination.

Current code ref(s):

```
#main > article > div > div > div > div > div.group__item.page__inner >
div.author__additional-actions > a
```

```
<a class="button button--secondary" href="https://www.linkedin.com/in/roberto-
alberola-a6a87965/">View LinkedIn profile</a>
```



Screen reader comments:

“Whilst using the tab key to explore the links on this page, I encountered a link which JAWS read to me as ‘View LinkedIn profile.’

As my method of navigation chosen was out of context, in finding this link it was not obvious what or who’s LinkedIn profile I would be viewing.

It would be preferable if, included in the link text that it had the person’s name included, as this LinkedIn profile was associated with ‘Roberto Alberola’, it would be helpful if the link text reflected this. Reading ‘View Roberto Alberola’s LinkedIn profile,’ in doing this it makes the link clear and concise for myself and other service users, whether travelling in/out of context.”

Solution:

It is recommended that additional link text is added to the ‘View LinkedIn profile’ link. The additional text should be descriptive for the destination of the link. Text similar to ‘View Roberto Alberola’s LinkedIn profile’ could be sufficient for screen reader users.

For example:

```
<a class="button button--secondary" href="https://www.linkedin.com/in/roberto-alberola-a6a87965/">View Roberto Alberola’s LinkedIn profile</a>
```

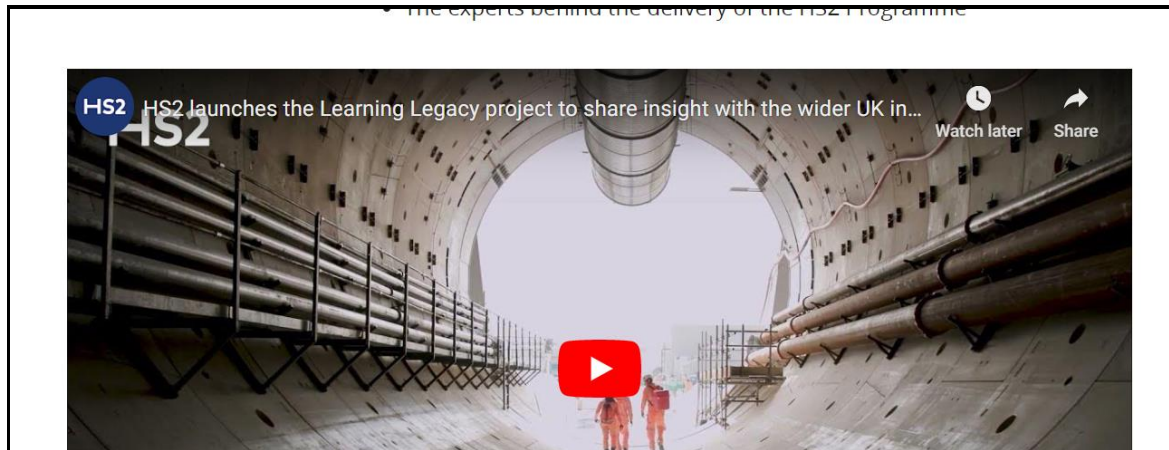


URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



A link is announced by screen reading software as 'Photo image of HS2 Ltd' within the YouTube video player that is present on the page. Screen reader users may not know that the link will take the user to the HS2 profile page of YouTube, as there is no descriptive text that tells the user of its purpose.

Current code ref(s):

```
#movie_player > div.ytp-chrome-top.ytp-show-cards-title > div.ytp-title-channel > a
<a class="ytp-title-channel-logo" target="_blank"
href="https://www.youtube.com/channel/UCssLFNvVfiBx2D1S0jfnI6A?feature=emb_ch_name_ex"
aria-label="Photo image of HS2 Ltd" style="background-image:
url(&quot;https://yt3.ggpht.com/17123v5dN0jjDVbA1UkGgXCyMvS5MTwD7ytjiF_KxU2FISkeBk7ECSxMXf7FetXgQraSTnkuw=s68-c-k-c0x00ffffff-no-rj&quot;);"></a>
```

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.



Solution:

It may not be possible to amend the accessible name of the profile link contained within the YouTube video as it is supplied by YouTube. We advise contacting YouTube and querying if it is possible for the links accessible name to be amended. Text similar to 'HS2 Ltd YouTube profile' could be sufficient for screen reader users.

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

For example:

```
<a class="ytp-title-channel-logo" target="_blank"
href="https://www.youtube.com/channel/UCssLfNvVfiBx2D1S0jfnI6A?feature=emb_ch_name_ex"
aria-label="HS2 Ltd YouTube profile" style="background-image:
url(&quot;https://yt3.ggpht.com/17l23v5dN0jjDVbA1UkGgXCyMvS5MTwD7ytjiF_KxU2FISkeBk7ECSxXMXf7FetXgQraSTnkuw=s68-c-k-c0x00ffffff-no-rj&quot;);"></a>
```



Medium Priority WCAG Level AA

The following section contains areas that failed to meet WCAG 2.1 AA. For the website to fall in line with WCAG 2.1 requirements, all A and AA issues must be resolved.

Non-Descriptive Names

Elements are present that do not contain a descriptive name.

WCAG Reference:

2.4.6 Headings and Labels (Level AA)

[Understanding Headings and Labels](#) | [How to Meet Headings and Labels](#)

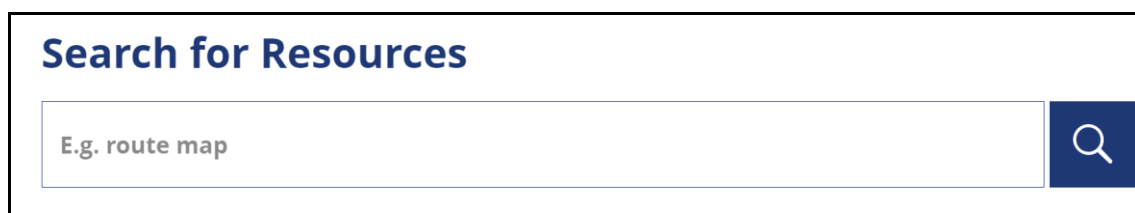
Issue ID: DAC_Non_Descriptive_Names_01

URL: <https://learninglegacy.hs2.org.uk/>

Page title: Homepage - HS2 Learning Legacy

Journey: Step 1

Screenshot:



The programmatic accessible name for the 'Search for resources' search input could be problematic for screen reader users. Screen reading software announces 'Search for:' as the programmatic accessible name. The text 'Search for:' does not specifically tell a screen reader user the purpose of the search input. It is ambiguous of the content that can be searched.

Current code ref(s):

#s

```
<div class="input--styled-container group__item">
  <label for="s" class="field-label screen-reader-text visuallyhidden">Search
  for: </label>
  <input class="field-input searchform__input" type="text" name="s" id="s"
  placeholder="E.g. route map" value="">
</div>
```



Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

Interactive elements must contain a descriptive programmatic accessible name. Descriptive programmatic accessible names ensure that screen reader users can understand the purpose of the element without navigating the content of the page.

We advise that the visually hidden text is removed, the example text is placed within the markup, and the visible label is connected to the text input.

For example:

```
<div class="input--styled-container group__item">
<label for="s">
<h2 class="heading h1">Search for Resources</h2>
</label>
<span>E.g. route map</span>
<input class="field-input searchform__input" type="text" name="s" id="s"
placeholder="E.g. route map" value="">
</div>
```

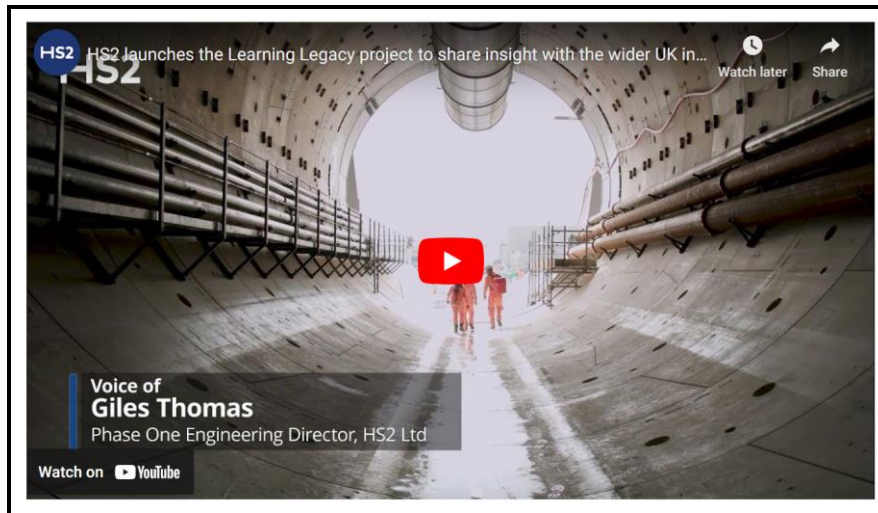


URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



The YouTube player contains many interactive elements that may not be descriptive enough for screen reader users to determine their purposes. For example, users are offered a 'Share' button and the name of the button does not tell the user that it can be activated to share the HS2 video to external sources.

Current code ref(s):

```
#movie_player > div.ytp-chrome-top.ytp-show-cards-title > div.ytp-chrome-top-buttons >
button.ytp-button.ytp-share-button.ytp-share-button-visible.ytp-show-share-title
<button class="ytp-button ytp-share-button ytp-share-button-visible ytp-show-
share-title" title="Share" aria-haspopup="true" aria-owns="ytp-id-24" data-
tooltip-opaque="true">
[...]
```

```
#movie_player > div.ytp-cued-thumbnail-overlay > button
<button class="ytp-large-play-button ytp-button ytp-large-play-button-red-bg"
aria-label="Play">
[...]
```



Screen reader comments:

“Viewing the buttons within the page using VoiceOver, might cause confusion for some users in relation to the items announced as ‘more’ and ‘play’ at the time of testing. Currently it is unclear what the items relate to, however if performing a single finger swipe to the left or right; it is possible to identify the related information.

Including a clear indication of the content, will resolve this issue in the future.”

“Whilst tabbing through this page I located a button which JAWS reported as ‘Share Menu.’ Due to the navigational method chosen by myself, finding this button in this way, the purpose is unclear to me and would be to other service users who perhaps only know this way of navigating a page.

It would be preferable if this button was marked up with more descriptive text in making this alteration the information can be accessed in and out of context and vital content would not be potentially missed.”

“Underneath the ‘Share Menu’ button I discovered a button whilst continuing to tab which JAWS read as ‘Play.’

Whilst moving out of context, this button does not have enough descriptive markup text associated with it. The only way to discover what this button would play is by activating it to find out the contents of the video or change the preferential method of navigation.

Ensuring this button was marked up with informative text would equip myself and other service users with all of the information so a choice could be made whether or not they wanted to watch this video, no matter what form of navigational method was chosen.”

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

It may not be possible to modify YouTube’s interactive elements to ensure that they provide a descriptive name for screen reader users. We advise contacting the supplier to query if the accessible names of interactive elements can be amended. Alternatively, create a video player that is built accessibility.



For example:

```
<button class="ytp-button ytp-share-button ytp-share-button-visible ytp-show-  
share-title" title="Share HS2 HS2 launches the Learning Legacy project to share  
insight with the wider UK infrastructure industry video externally" aria-  
haspopup="true" aria-owns="ytp-id-24" data-tooltip-opaque="true" aria-label="Share  
HS2 HS2 launches the Learning Legacy project to share insight with the wider UK  
infrastructure industry video externally">  
[...]  
<div class="ytp-share-title">Share</div>  
</button>
```



Colour Contrast [Text]

Some of the colour combinations found on the site do not meet enhanced contrasts guidelines.

WCAG Reference:

1.4.3 Contrast (Minimum) (Level AA)

[Understanding Contrast \(Minimum\)](#) | [How to Meet Contrast \(Minimum\)](#)

1.4.6 Contrast (Enhanced) (Level AAA)

[Understanding Contrast \(Enhanced\)](#) | [How to Meet Contrast \(Enhanced\)](#)

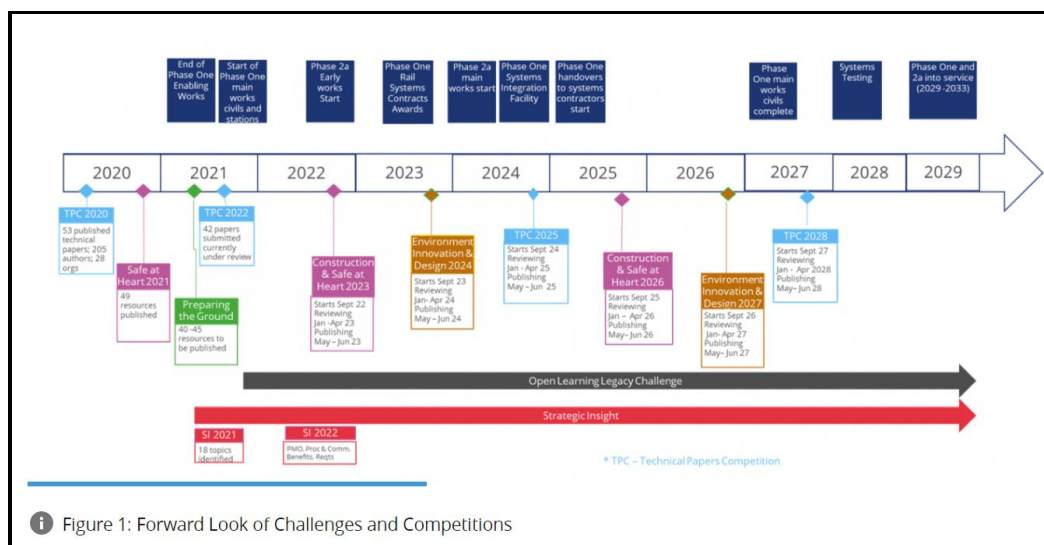
Issue ID: DAC_Colour_Contrast_Text_01

URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



Low vision users may have a problematic experience reading the information that is contained within the ' Figure 1: Forward Look of Challenges and Competitions' image. The contrast of text against adjacent colours is less than the minimum ratio required. Low vision users may cause strain to their eyes whilst reading the information present.

Foreground: #FFFFFF
Background: #5DB9F4
The contrast ratio is: **2.2:1**
1.4.3 Contrast (Minimum) (AA)
Fail for large and regular text
1.4.6 Contrast (Enhanced) (AAA)
Fail for large and regular text

Foreground: #FFFFFF
Background: #BB579B
The contrast ratio is: **4.2:1**
1.4.3 Contrast (Minimum) (AA)
Pass for large text only. Fail for regular text
1.4.6 Contrast (Enhanced) (AAA)
Fail for large and regular text

Foreground: #FFFFFF
Background: #44A939
The contrast ratio is: **3:1**
1.4.3 Contrast (Minimum) (AA)
Pass for large text only. Fail for regular text
1.4.6 Contrast (Enhanced) (AAA)
Fail for large and regular text

Foreground: #FFFFFF
Background: #BC6D08
The contrast ratio is: **3.9:1**
1.4.3 Contrast (Minimum) (AA)
Pass for large text only. Fail for regular text
1.4.6 Contrast (Enhanced) (AAA)
Fail for large and regular text



Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > figure:nth-child(8) > img

```

Solution:

Ensure that the contrast between text and the background is in accordance with WCAG 2.1 recommendations:

- If the text is not bold and its size is less than 18pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is not bold and its size is at least 18pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.
- If the text is bold and its size is less than 14pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is bold and its size is at least 14pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.

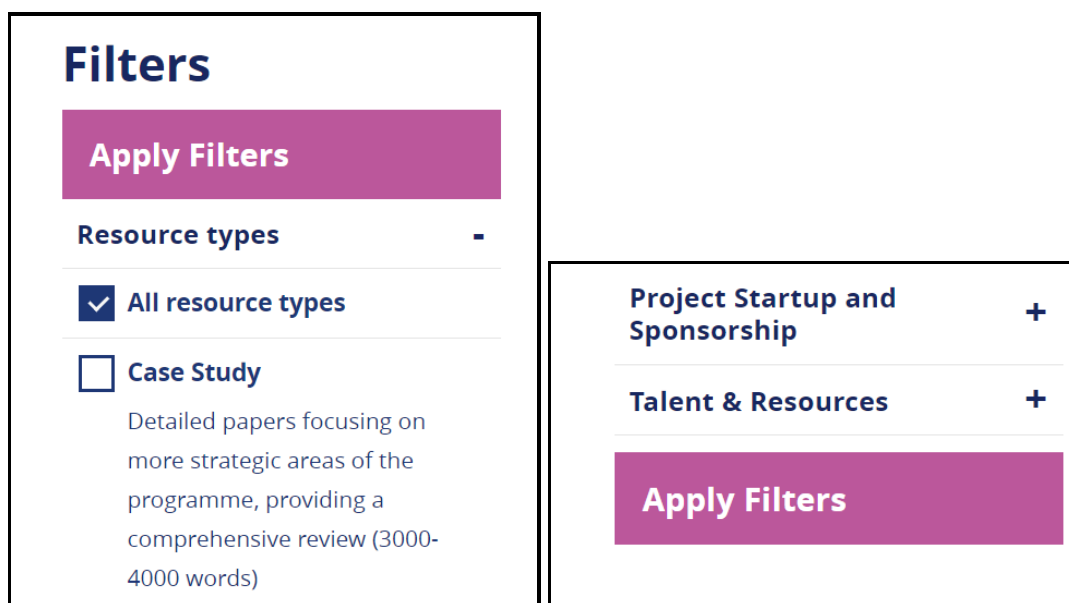


URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:



A pink background colour is set for the 'Apply filters' button of the filter section. The chosen colour against the white text may be problematic for low vision users to read. This is because the colour contrast between the pink background and the white text has a colour ratio that is below the minimum for text content.

Foreground: #FFFFFF

Background: #BB579B

The contrast ratio is: **4.2:1**

1.4.3 Contrast (Minimum) (AA)

Pass for large text only. Fail for regular text

1.4.6 Contrast (Enhanced) (AAA)

Fail for large and regular text

Current code ref(s):

#search-filters__inner > button:nth-child(2)

```
<button class="button search-submit">Apply Filters</button>
```

#search-filters__inner > button:nth-child(5)

```
<button class="button search-submit">Apply Filters</button>
```



Examples of additional instances:

URL: https://learninglegacy.hs2.org.uk/?s=Digitising+the+permit-to-dig+process&resource_type%5B%5D=&orderSearchBy=relevance

Page title: You searched for Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 4, a

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

Ensure that the contrast between text and the background is in accordance with WCAG 2.1 recommendations:

- If the text is not bold and its size is less than 18pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is not bold and its size is at least 18pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.
- If the text is bold and its size is less than 14pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is bold and its size is at least 14pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.



URL: <https://learninglegacy.hs2.org.uk/authors/roberto-alberola/#main>

Page title: Roberto Alberola - HS2 Learning Legacy

Journey: Step 10

Screenshot:



The chosen colours for the 'View LinkedIn profile' link may make it problematic for low vision users to see the text. The white text against the light blue background colour returns a contrast ratio that is less than the minimum required for text content. A low contrast ratio may cause eyestrain for low vision users. Additionally, the focus and hover change appears to make the button lighter.

Foreground: #FFFFFF

Background: #3C96C8

The contrast ratio is: **3.3:1**

1.4.3 Contrast (Minimum) (AA)

Pass for large text only. Fail for regular text

1.4.6 Contrast (Enhanced) (AAA)

Fail for large and regular text

Current code ref(s):

```
#main > article > div > div > div > div > div.group__item.page__inner >
```

```
div.author__additional-actions > a
```

```
<a class="button button--secondary" href="https://www.linkedin.com/in/roberto-alberola-a6a87965/">View LinkedIn profile</a>
```



Low vision comments:

“On the Robert alberola’ Page, when I was reading through the information on the page when I came across the view LinkedIn profile it had white text against a dark blue background when I tested the colour contrast it failed at 3:3:1 what I would like to see happen would be for the colour of the background to be changed so that it passes colour contrast.”

Solution:

Ensure that the contrast between text and the background is in accordance with WCAG 2.1 recommendations:

- If the text is not bold and its size is less than 18pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is not bold and its size is at least 18pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.
- If the text is bold and its size is less than 14pt then it must meet a minimum colour contrast ratio of 4.5:1 to Pass AA.
- If the text is bold and its size is at least 14pt then it must meet a minimum colour contrast ratio of 3:1 to Pass AA.



Text Resize

Text of the website cannot be resized to 200% without loss of content/ functionality.

WCAG Reference:

1.4.4 Resize text (Level AA)

[Understanding Resize text](#) | [How to Meet Resize text](#)

1.4.8 Visual Presentation (Level AAA)

[Understanding Visual Presentation](#) | [How to Meet Visual Presentation](#)

Issue ID: DAC_Text_Resize_01

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/#main>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Screenshot:



At 200% resized text, the 'Written by', 'Resource type', 'Intended audience', and 'Tags' content is not visible to users. Low vision users increase the text size for an easier reading experience, there may be some users that are unaware that the 'Written by', 'Resource type', 'Intended audience', and 'Tags' information is provided when magnification is less than 200%.



Current code ref(s):

```
#main > article > div > div > div > div.document__intro.group >
div.group__item.page__aside.document__summary
<div class="group__item page__aside document__summary">
<dl class="sidebar-info-list">
<dt>Written by</dt>
<dd class="author-list-item-brief">
<a href="https://learninglegacy.hs2.org.uk/authors/clive-metti/">
<div class="author-list-item-brief__image">
[...]
```

Solution:

We advise that the content is amended to ensure that it is visible to the user when the user increases the text size of the page to 200%. It will provide a better reading experience to low vision users.



Reflow

Content is lost, obscured or the page is not set to a single-column view.

WCAG Reference:

1.4.10 Reflow (Level AA)

[Understanding Reflow](#) | [How to Meet Reflow](#)

Issue ID: DAC_Reflow_01

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/#main>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Screenshot:

Written by

 [Clive Metti](#)
(Skanska/CSjv)

 [Seán Quinn](#)

 [Steve Cable](#)

Resource type
[Video](#)

Intended audience
Contractors

Tags
[Working in the Public Highway](#)

Digitising the permit-to-dig process

Published on 25 April 2022 [Print this document](#)

Previously, the permit system

Resizing the text to 400% and setting the dimensions of the browser to 1280px X 1024px causes the 'Written by', 'Resource type', 'Intended audience', and 'Tags' to not display. This means that low vision users that need to read content in a single-column are not receiving the 'Written by', 'Resource type', 'Intended audience', and 'Tags' information.



Current code ref(s):

```
#main > article > div > div > div > div.document__intro.group >
div.group__item.page__aside.document__summary
<div class="group__item page__aside document__summary">
<dl class="sidebar-info-list">
<dt>Written by</dt>
<dd class="author-list-item-brief">
<a href="https://learninglegacy.hs2.org.uk/authors/clive-metti/">
<div class="author-list-item-brief__image">
[...]
```

Solution:

Ensure that resizing the text to 400% and setting the dimensions of the browser to 1280px X 1024px does not cause content to become missing. Content should be available in a single-column for low vision users.



URL: <https://learninglegacy.hs2.org.uk/document-themes/communications-engagement/>

Page title: Communications and Engagement Archives - HS2 Learning Legacy

Journey: Step 7

Screenshot:



Some low vision users increase their text size to 400% and set the browser dimensions to 1280px x 1024px for a single-column reading experience. Positioning content into a single column can make it easier for a low vision user to navigate and read the content of the page. Users who have set their text size to 400% and set the browser dimensions to 1280px x 1024px will find that the 'Communications' text spilled out of the boundaries and causes horizontal scrolling.

Current code ref(s):

```
#main > article > div > div > div > div.document__intro.group > div > h1  
<h1 class="heading size--xxxl page__title" style=">Communications and Engagement</h1>
```

Low vision comments:

"When I tested the reflow of the communications engagement page, the word communication spilled off the page which meant horizontal scrolling was present. I expected the page to wrap so that horizontal scrolling is not present."

Solution:

Ensure that resizing the text to 400% and setting the dimensions of the browser to 1280px X 1024px does not cause content to spill out of the pages boundaries. Content should flow into a single-column, unless it is vital for the content to have two-dimensional scrolling.



Low Priority WCAG Level AAA

Areas of the website which fail to meet the WCAG 2.1 AAA requirements are not in scope for the purposes of this audit, however, where issues were encountered by our analysts, these have been reported. We highly recommend that these issues are resolved.

Abbreviations

Abbreviations are not expanded in the first instance/ explained and may be difficult for users with cognitive impairments to understand.

WCAG Reference:

3.1.4 Abbreviations (Level AAA)

[Understanding Abbreviations](#) | [How to Meet Abbreviations](#)

Issue ID: DAC_Abbreviations_01

URL: <https://learninglegacy.hs2.org.uk/>

Page title: Homepage - HS2 Learning Legacy

Journey: Step 1

Screenshot:

 <p>Collaboration approach between CSJv and HS2 on EWC South</p>	<p>2 Dec - Demystifying cryptocurrency and blockchain to enhance major projects and better understand future estimating processes, NCE Techfest 2021</p>
--	---

Abbreviations are present and the abbreviations are not introduced on the first instance for users. Users will need to leave the site to research the meanings of the abbreviations, and this could cause difficulties. Some users that have short memory could forget their location or the meanings of abbreviations, and other users may not be able to return to the page easily. It may also be challenging for users to decode words. These abbreviations are 'CSJv' and 'EWC' that are within the 'Latest Resources' section, and a 'NCE' abbreviation in the 'Latest Events' section.



Current code ref(s):

```
#main > article > div > div > div:nth-child(2) > section > ul > li:nth-child(2) > article > div > a
<a href="https://learninglegacy.hs2.org.uk/document/collaboration-approach-
between-csjv-and-hs2-on-ewc-south/" class="clean-link">
[...]
```

Collaboration approach between CSJv and HS2 on EWC South

```
</p>
</div>
</a>
```

```
#main > article > div > div > div:nth-child(3) > section > ul > li:nth-child(1) > article > div > a
<a href="https://learninglegacy.hs2.org.uk/events/2-dec-demystifying-
cryptocurrency-and-blockchain-to-enhance-major-projects-and-better-understand-
future-estimating-processes-nce-techfest-2021/" class="clean-link">
[...]
```

2 Dec – Demystifying cryptocurrency and blockchain to enhance major projects and better understand future estimating processes, NCE Techfest 2021

```
</p>
</div>
</a>
```

Screen reader comments:

“There is a link with several abbreviations within the link text on this page that holds no explanation. JAWS reported it as ‘Collaboration approach between CSJV and HS2 on EWC South.’

Finding this link with these abbreviations within the link text could prove a problem for an individual who is not familiar with the abbreviations or the terms, as they would not be fully aware of what type of information they would access if they activated the link.

I would appreciate a clear explanation within the link text regarding the full meaning of ‘Collaboration approach between CSJV and HS2 on EWC South.’”

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.



Solution:

We advise that the abbreviations 'CSJV', 'EWC', and 'NCE' are introduced on first instance to ensure that users understanding the meaning of the abbreviations without leaving the site to research the abbreviations.



New Window

There are elements which open in a new window without informing screen reader users first.

WCAG Reference:

3.2.5 Change on Request (Level AAA)

[Understanding Change on Request](#) | [How to Meet Change on Request](#)

Issue ID: DAC_New_Window_01

URL: <https://learninglegacy.hs2.org.uk/about-hs2/#11>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Screenshot:

Find out more

Visit the HS2 website at www.hs2.org.uk and follow us on our social media channels:

<https://twitter.com/HS2Ltd>

<https://www.facebook.com/HS2Ltd>

<https://www.linkedin.com/company/high-speed-two-hs2-ltd>

<https://www.instagram.com/HS2Ltd>

The 'Find out more' content provides a link to the HS2 website and social media platforms. Each link opens a new tab/ window. There is no information provided to users that activating the links will open a new tab/ window, and this may make it difficult for users to return to the previous page after they activate the links. This is due to the browsers back button becoming unavailable.



Current code ref(s):

#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(1)

```
<a href="http://www.hs2.org.uk" target="_blank" rel="noopener  
norereferrer">www.hs2.org.uk</a>
```

#main > article > div > div > div > div.document__main__content > p:nth-child(67) > br:nth-child(2)

```
<a href="https://twitter.com/HS2ltd" target="_blank" rel="norereferrer  
noopener">https://twitter.com/HS2ltd</a>
```

#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(5)

```
<a href="https://www.facebook.com/HS2ltd" target="_blank" rel="norereferrer  
noopener">https://www.facebook.com/HS2ltd</a>
```

#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(7)

```
<a href="https://www.linkedin.com/company/high-speed-two-hs2-ltd" target="_blank"  
rel="norereferrer noopener">https://www.linkedin.com/company/high-speed-two-hs2-ltd</a>
```

#main > article > div > div > div > div.document__main__content > p:nth-child(67) > a:nth-child(9)

```
<a href="https://www.instagram.com/HS2ltd" target="_blank" rel="norereferrer  
noopener">https://www.instagram.com/HS2ltd</a>
```

Cognitive user comments:

"Every link in the 'Find out more' section of the page opens into a new tab without any warning, making navigating back to the previous page more difficult for me. Other users may not realize that a new tab has opened, so may struggle to realize why they cannot return using conventional means, like the back button. It is generally better to open links into the same tab, so users can maintain their previous page history and navigate freely between them like a breadcrumb trail using the browsers back and forward buttons."

Solution:

We advise that links that can open new tabs/ window tell users of the functionality beforehand. This helps users understand that opening the link will cause the browsers back button to become unavailable. The text (Opens new tab) could be added to the link text and it will ensure users are aware that a new tab/ window will open.



URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:

Contributing to the Learning Legacy

If you have worked on the HS2 project and have a learning legacy to share then please read the [guidance](#) on how to submit a Learning Legacy paper or other resource,

If you are interested in becoming an industry partner please contact learninglegacy@hs2.org.uk.

[Guidance](#) for industry partners on how to request a speaker from the HS2 Learning Legacy Network for an event or to publish content in industry publications.

Users can find that there is more than one guidance link within the page content. A guidance link can be found below 'Contributing to the Learning Legacy', and another below 'Industry Partners'. These guidance links can open a new tab/ window without informing the links behaviour beforehand. Users could have difficulty returning to the previous page as the browsers back button becomes unavailable.

Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > p:nth-child(27) > a  
<a href="https://learninglegacy.hs2.org.uk/guidelines-for-industry-partners" target="_blank" rel="noreferrer noopener">Guidance</a>
```

```
#main > article > div > div > div > div.document__main__content > p:nth-child(13) > a  
<a href="https://learninglegacy.hs2.org.uk/how-to-submit-a-learning-legacy-resource" target="_blank" rel="noreferrer noopener">guidance </a>
```



Cognitive user comments:

“The link 'guidance' opens into a new tab without any warning, making navigating back to the previous page more difficult for me. Other users may not realize that a new tab has opened, so may struggle to realize why they cannot return using conventional means, like the back button. It is generally better to open links into the same tab, so users can maintain their previous page history and navigate freely between them like a breadcrumb trail using the browsers back and forward buttons.”

Solution:

We advise that links that can open new tabs/ window tell users of the functionality beforehand. This helps users understand that opening the link will cause the browsers back button to become unavailable. The text (Opens new tab) could be added to the link text and it will ensure users are aware that a new tab/ window will open.

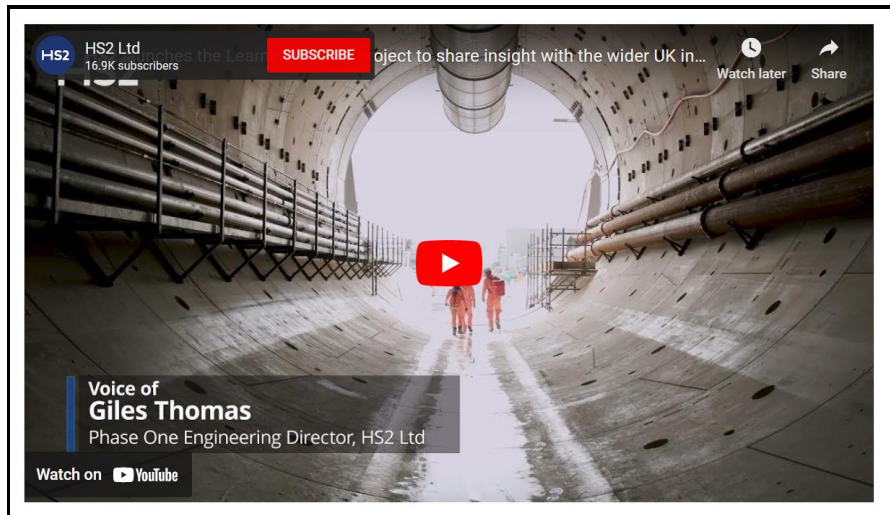


URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:



The YouTube video player contains a few links that open a new tab/ window once activated by the user. There is no information present within the link text that tells the user that activating the link will cause a new tab/ window to appear. New tabs and windows have their back buttons disabled, and this often makes it difficult for the user to return to their previous page.

Current code ref(s):

#movie_player > a

```
<a class="ytp-impression-link" aria-label="Watch on YouTube" target="_blank"
href="https://www.youtube.com/watch?v=0n-83x6-vcE&feature=emb_imp_woyt" data-
layer="8">
<div class="ytp-impression-link-content" aria-hidden="true">
<div class="ytp-impression-link-text">Watch on</div>
[...]
```

#movie_player > div.ytp-chrome-top.ytp-show-cards-title > div.ytp-title > div > a

```
<a class="ytp-title-link yt-ui-sessionlink" target="_blank" data-
sessionlink="feature=player-title" tabindex="-1"
href="https://www.youtube.com/watch?v=0n-83x6-vcE">HS2 launches the Learning
Legacy project to share insight with the wider UK infrastructure industry</a>
```



Screen reader comments:

“The ‘Watch on YouTube.’ link on this page opens in a new tab.

This issue is being flagged, as nowhere within the link text does it state that a new tab will be opened when the link is triggered and, therefore from a navigational perspective, it could cause the service user to try navigating out of the tab by reversing (Alt + left arrow). That would not be possible as they could only exit the tab by closing it by using the relevant keys (Control + W). A less experienced screen reader user may not be aware of this exit strategy and, after a while, could end up pressing alt + F4. That would close down the browser completely, causing them to spend more time returning to their previous location after restarting the browser.

I would like to find a clear indication within the link text for the ‘Watch on YouTube,’ link informing the user they will be opening a new tab once the link has been activated.”

Examples of additional instances:

URL: <https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>

Page title: Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 5

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

We advise that links that can open new tabs/ window tell users of the functionality beforehand. This helps users understand that opening the link will cause the browsers back button to become unavailable. The text (Opens new tab) could be added to the link text and it will ensure users are aware that a new tab/ window will open.



Links Out of Context

Some links were not descriptive enough for screen reader users when navigating out of context.

WCAG Reference:

2.4.9 Link Purpose (Link Only) (Level AAA)

[Understanding Link Purpose \(Link Only\)](#) | [How to Meet Link Purpose \(Link Only\)](#)

Issue ID: DAC_Links_Out_Of_Context_01

URL: <https://learninglegacy.hs2.org.uk/about-learning-legacy/>

Page title: About Learning Legacy - HS2 Learning Legacy

Journey: Step 3

Screenshot:

Contributing to the Learning Legacy

If you have worked on the HS2 project and have a learning legacy to share then please read the [guidance](#) on how to submit a Learning Legacy paper or other resource,

If you are interested in becoming an industry partner please contact learninglegacy@hs2.org.uk.

[Guidance](#) for industry partners on how to request a speaker from the HS2 Learning Legacy Network for an event or to publish content in industry publications.

Two links are provided for users to view 'Guidance'. The guidance links take the user to different destinations, and it is not clear by the link text alone that the links have a different purpose. Users will need to read adjacent paragraph text to understand the destination of the links.



Current code ref(s):

```
#main > article > div > div > div > div.document__main__content > p:nth-child(13) > a  
<a href="https://learninglegacy.hs2.org.uk/how-to-submit-a-learning-legacy-resource" target="_blank" rel="noreferrer noopener">guidance </a>
```

```
#main > article > div > div > div > div.document__main__content > p:nth-child(27) > a  
<a href="https://learninglegacy.hs2.org.uk/guidelines-for-industry-partners" target="_blank" rel="noreferrer noopener">Guidance</a>
```

Solution:

We advise that the guidance links are amended to be descriptive for the purpose of the links. This will help screen reader users understand the differences between the links. Adding surrounding text that is descriptive for the purpose of the link could be sufficient for screen reader users.

For example:

```
<a href="https://learninglegacy.hs2.org.uk/how-to-submit-a-learning-legacy-resource" target="_blank" rel="noreferrer noopener">guidance on how to submit a  
Learning Legacy paper or other resource</a>
```



Usability feedback

The following section contains feedback from our analysts that although do not fail to meet WCAG 2.1 may prove challenging for users of the website.

Voice Activation and Custom Checkboxes (Usability)

Custom checkboxes cannot be seen by voice activation software.

Reference:

Usability

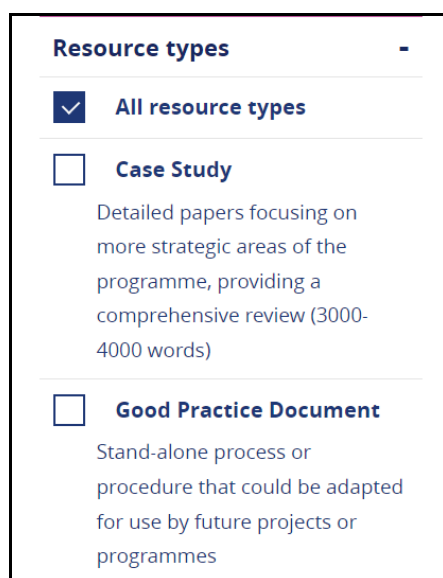
Issue ID: DAC_Usability_01

URL: <https://learninglegacy.hs2.org.uk/?s=>

Page title: You searched for - HS2 Learning Legacy

Journey: Step 4

Screenshot:



Resource types -

- ☒ **All resource types**
- ☐ **Case Study**
Detailed papers focusing on more strategic areas of the programme, providing a comprehensive review (3000-4000 words)
- ☐ **Good Practice Document**
Stand-alone process or procedure that could be adapted for use by future projects or programmes

Voice activation users are unable to activate the checkboxes that are within each filter accordion. This is because the native checkboxes are not visible to voice activation software. Voice activation users will need to use an alternative method of navigation and these alternative methods could make it difficult to navigate the content.



Current code ref(s):

#filter-resource-type-439

```
<input type="checkbox" class="input--checkbox" name="resource_type[]" id="filter-resource-type-439" value="439">
```

#filter-resource-type-442

```
<input type="checkbox" class="input--checkbox" name="resource_type[]" id="filter-resource-type-442" value="442">
```

Voice activation comments:

"I found I was unable to select any of the checkboxes found under the heading (Apply Filters) in any of the expandable links that I choose to open.

I would have expected to have been able to open any of the tick/check boxes using label by name or Click Box commands."

Solution:

Native checkboxes must be visible to dragon voice activation software. The native checkboxes can be hidden by CSS that still enables voice activation software to see the checkboxes. Opacity can be set to 0, and height plus width must be set to 2px. Additionally, setting position to relative and overflow to hidden can ensure the checkbox is visible to voice activation software.

```
opacity: 0;  
position: relative;  
height: 2px;  
width: 2px;  
overflow: hidden;
```



Dragon Visual Numbers Repositioned (Usability)

Numbers that display for Dragon voice activation software are repositioned outside of their containers.

Reference:

Usability

Issue ID: DAC_Usability_02

URL: <https://learninglegacy.hs2.org.uk/>

Page title: Homepage - HS2 Learning Legacy

Journey: Step 1

Screenshot:



Dragon voice activation users that speak the command 'Click link' will notice that the numbers that are shown to activate any of the links present are positioned outside of their containers. This is due to a CSS class '+' that is present with a property of margin-top: 2.777777778em; The property and value repositions the numbers out of dragons visual containers.

Current code ref(s):

```
*** {  
    margin-top: 2.777777778em;  
}
```

Voice activation comments:

"When using the command 'Click Link' the green tags are present however the numbers are not in the green tags as they are normally, I found this confusing as I could mistake which number relates to which tag and then easily select the wrong one, and on some occasions when the number display is on a brightly coloured background it makes the number difficult to read."



Solution:

We advise that the CSS class '+' is removed from the stylesheet. This can ensure that Dragon voice activation software can display its digits correctly for voice activation users. Modifying text also modifies Dragons outcomes.

For example:

```
***{  
margin-top: 2.7777777778em;  
}
```



Content Visible with Inverted Contrast (Usability)

Content became visible while inverted contrasts were present and caused confusion for low vision users.

Reference:

Usability

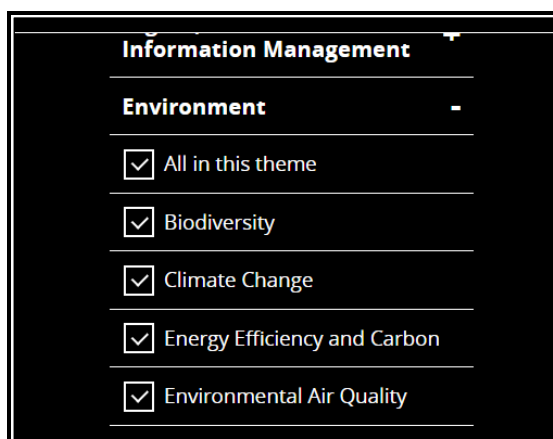
Issue ID: DAC_Usability_03

URL: https://learninglegacy.hs2.org.uk/?s=Digitising+the+permit-to-dig+process&resource_type%5B%5D=&orderSearchBy=relevance

Page title: You searched for Digitising the permit-to-dig process - HS2 Learning Legacy

Journey: Step 4

Screenshot:



Checkboxes within the filters list are all visibly checked whilst the user is navigating the page with inverted contrast. Inverted contrasts reduce screen glare for low vision users, and this can make it easier to read the content. Since the checkmarks are present, it caused confusion for a low vision user as it is assumed that all checkboxes are checked.

Current code ref(s):

```
#search-filters__inner > div > ol > li:nth-child(1) > label
```

```
<label for="filter-theme-all">
<input type="checkbox" data-all-checkbox-selector="true" class="input--checkbox"
name="resource_type[]" id="filter-theme-all" value="">
<span class="checkbox-label">
<strong>All resource types</strong>
</span>
</label>
```



Low vision comments:

“Once I performed a search which came up as expected, there was a filter section on the left-hand side of the page that when I had inverted colours turned off, I was able to tell which option I had selected and this wasn’t the same outcome when inverted colours were turned on. They all appeared to be selected which confused me. What I would like to see happen would for the checkboxes to be appeared both ticked or not unticked depending on if they are selected or not.”

Solution:

We advise amending the `::before` pseudo checkmark of the checkboxes to not be visibly present if the user is navigating with inverted contrasts. The checkmark could be added to the page after the user has selected a checkbox. Alternatively, modify the CSS to ensure that checkboxes are not visible if there is no selection made.



No Active Element Indication (Usability)

Active elements did not display a visual indication to users who move their mouse pointer over the elements.

Reference:

Usability

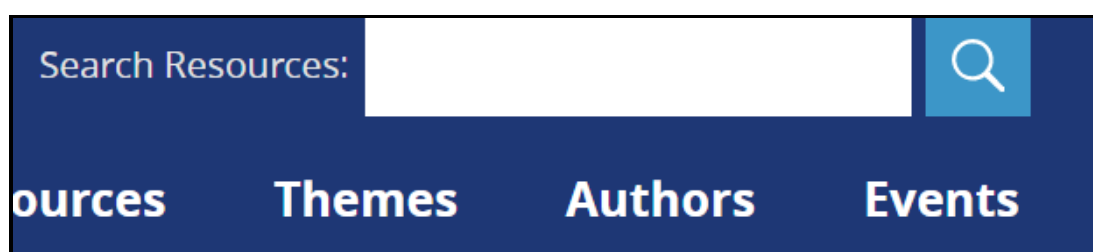
Issue ID: DAC_Usability_04

URL: <https://learninglegacy.hs2.org.uk/>

Page title: Homepage - HS2 Learning Legacy

Journey: Step 1

Screenshot:



Users navigating the page with a mouse will find that the search buttons adjacent to search text inputs do not have a visual indicator that they can be clicked. Users rely on visual indicators to recognise that the element can cause an action.



Current code ref(s):

```
#global-header > div > nav.group__item.secondary-nav-container.margin--none > form > div  
> button
```

```
<button class="search-form-compact__button">  
[...]  
<span class="visuallyhidden">Search</span>  
</button>
```

Low vision comments:

"On the homepage when I hovered over the search icons there was no cursor change. I was unable to tell if the button was clickable. I expected the cursor to change when I hovered over the search button to tell me that the element can be clicked."

Examples of additional instances:

Search buttons, and expanding side navigation buttons.

URL: <https://learninglegacy.hs2.org.uk/about-hs2/>

Page title: About the HS2 Programme - HS2 Learning Legacy

Journey: Step 2

Current code ref(s):

```
#main > article > div > div > aside > div > ol > li:nth-child(3) > div > button  
<button class="stacked-nav__toggle" aria-expanded="false"><span  
class="visuallyhidden">Toggle Themes sub-navigation</span></button>
```

Additional instances of this issue may exist on other pages throughout the website; wherever this issue occurs, they too will need to be resolved.

Solution:

We advise that any interactive elements on the page that can be activated by the user has two forms of visual indication that the element can be clicked on mouse over. A cursor change is one method, and a visual border change is another method. Links can display an underline that is removed on mouse over.



Journeys

1. HS2 Learning Legacy homepage
<https://learninglegacy.hs2.org.uk/>
2. About the HS2 Programme page
<https://learninglegacy.hs2.org.uk/about-hs2/>
3. About Learning Legacy page
<https://learninglegacy.hs2.org.uk/about-learning-legacy/>
4. Search
<https://learninglegacy.hs2.org.uk/?s=>
 - a. search for 'Digitising the permit-to-dig process'
5. Digitising the permit-to-dig process' page
<https://learninglegacy.hs2.org.uk/document/digitising-the-permit-to-dig-process/>
6. Consents and powers page
<https://learninglegacy.hs2.org.uk/document-themes/consents-powers/>
7. Communications engagement page
<https://learninglegacy.hs2.org.uk/document-themes/communications-engagement/>
8. Design engineering architecture page
<https://learninglegacy.hs2.org.uk/document-themes/design-engineering-architecture/>
9. Authors page
<https://learninglegacy.hs2.org.uk/authors/>
 - a. search for 'Robert alberola' and view profile
10. Robert alberola' Page
<https://learninglegacy.hs2.org.uk/authors/roberto-alberola/>
11. Events
<https://learninglegacy.hs2.org.uk/events/>



Classification of Accessibility Issues

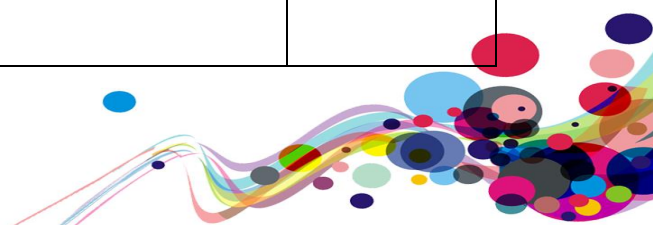
The following scoring system was used to indicate the status of the sites with regards to each W3C WAI checkpoint up to and including Level AA:

Status	Description
Pass (M) Medium Priority Pass (H) High Priority	The website meets the requirements of the checkpoint.
Fail (M) Medium Priority	The website fails to meet the requirements against AA criteria measured against WCAG 2.1
Fail (H) High Priority	The website fails to meet the requirements against A criteria measured against WCAG 2.1 and more severe accessibility issues were identified.
Not Applicable (N/A)	No content was found on the website to which the checkpoint would relate.
Out of scope	Areas which fail to meet the requirements against AAA criteria measured against WCAG 2.1 are not in scope for the purposes of this audit.



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

<p>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. (Level A)</p>	Fail (H)
<p>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</p> <ul style="list-style-type: none"> • 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. <p>(Level A)</p>	Pass (H)
<p>Captions (Pre-recorded): 1.2.2 Captions are provided for all pre-recorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (Level A)</p>	Pass (H)
<p>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 synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (Level A)</p>	Fail (H)
<p>Captions (Live): 1.2.4 Captions are provided for all live audio content in synchronized media. (Level AA)</p>	(N/A)
<p>Audio Description (Pre-recorded): 1.2.5 Audio description is provided for all pre-recorded video content in synchronized media. (Level AA)</p>	Fail (M)



Sign Language (Pre-recorded): 1.2.6 Sign language interpretation is provided for all pre-recorded audio content in synchronized media . (Level AAA)	Out of scope
Extended Audio Description (Pre-recorded): 1.2.7 Where pauses in foreground audio are insufficient to allow audio descriptions to convey the sense of the video, extended audio description is provided for all pre-recorded video content in synchronized media . (Level AAA)	Out of scope
Media Alternative (Pre-recorded): 1.2.8 An alternative for time-based media is provided for all pre-recorded synchronized media and for all pre-recorded video-only media. (Level AAA)	Out of scope
Audio-only (Live): 1.2.9 An alternative for time-based media that presents equivalent information for live audio-only content is provided. (Level AAA)	Out of scope
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 (H)
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)	Fail (H)
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)	(N/A)



<p>Orientation: (WCAG 2.1)</p> <p>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.</p> <p>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.</p> <p>(Level AA)</p>	<p>Pass (M)</p>
<p>Identify Input Purpose: (WCAG 2.1)</p> <p>1.3.5 The purpose of each input field collecting information about the user can be programmatically determined when :</p> <ul style="list-style-type: none"> • 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. <p>(Level AA)</p>	<p>Pass (M)</p>
<p>Identify Purpose: (WCAG 2.1)</p> <p>1.3.6 In content implemented using mark-up languages, the purpose of User Interface Components, icons, and regions can be programmatically determined.</p> <p>(Level AAA)</p>	<p>Out of scope</p>
<p>Use of Colour:</p> <p>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.</p> <p>(Level A)</p>	<p>(N/A)</p>
<p>Audio Control:</p> <p>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.</p> <p>(Level A)</p>	<p>(N/A)</p>



<p>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:</p> <ul style="list-style-type: none"> • 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. <p>(Level AA)</p>	<p>Fail (M)</p>
<p>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.</p> <p>(Level AA)</p>	<p>Fail (M)</p>
<p>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</p> <ul style="list-style-type: none"> • Customizable: The image of text can be visually customized to the user's requirements; • Essential: A particular presentation of text is essential to the information being conveyed. <p>Note: Logotypes (text that is part of a logo or brand name) are considered essential.</p> <p>(Level AA)</p>	<p>Pass (M)</p>



<p>Contrast (Enhanced): 1.4.6 The visual presentation of text and images of text has a contrast ratio of at least 7:1, except for the following:</p> <ul style="list-style-type: none"> • Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 4.5:1; • 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. <p>(Level AAA)</p>	<p>Out of scope</p>
<p>Low or No Background Audio: 1.4.7 For pre-recorded audio-only content that (1) contains primarily speech in the foreground, (2) is not an audio CAPTCHA or audio logo, and (3) is not vocalization intended to be primarily musical expression such as singing or rapping, at least one of the following is true:</p> <p>Understanding Success Criterion 1.4.7</p> <ul style="list-style-type: none"> • No Background: The audio does not contain background sounds. • Turn Off: The background sounds can be turned off. • 20 dB: The background sounds are at least 20 decibels lower than the foreground speech content, with the exception of occasional sounds that last for only one or two seconds. <p>Note: Per the definition of "decibel," background sound that meets this requirement will be approximately four times quieter than the foreground speech content.</p> <p>(Level AAA)</p>	<p>Out of scope</p>



<p>Visual Presentation: 1.4.8 For the visual presentation of blocks of text, a mechanism is available to achieve the following: Understanding Success Criterion 1.4.8</p> <ol style="list-style-type: none"> 1. Foreground and background colours can be selected by the user. 2. Width is no more than 80 characters or glyphs (40 if CJK). 3. Text is not justified (aligned to both the left and the right margins). 4. Line spacing (leading) is at least space-and-a-half within paragraphs, and paragraph spacing is at least 1.5 times larger than the line spacing. 5. Text can be resized without assistive technology up to 200 percent in a way that does not require the user to scroll horizontally to read a line of text on a full-screen window. <p>(Level AAA)</p>	<p>Out of scope</p>
<p>Images of Text (No Exception): 1.4.9 Images of text are only used for pure decoration or where a particular presentation of text is essential to the information being conveyed.</p> <p>Note: Logotypes (text that is part of a logo or brand name) are considered essential.</p> <p>(Level AAA)</p>	<p>Out of scope</p>
<p>Reflow: (WCAG 2.1) 1.4.10 Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for :</p> <ul style="list-style-type: none"> • Vertical scrolling content at a width equivalent to 320 CSS pixels; • Horizontal scrolling content at a height equivalent to 256 CSS pixels. <p>Except for parts of the content which require two-dimensional layout for usage or meaning.</p> <p>Note: 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.</p> <p>Note: 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.</p> <p>(Level AA)</p>	<p>Fail (M)</p>



<p>Non-text Contrast: (WCAG 2.1) 1.4.11 The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent color(s):</p> <ul style="list-style-type: none"> • 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. <p>(Level AA)</p>	<p>Pass (M)</p>
<p>Text Spacing: (WCAG 2.1) 1.4.12 presentation of graphics is essential to the information being conveyed. In content implemented using mark-up 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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>(Level AA)</p>	<p>Pass (M)</p>



<p>Content on Hover or Focus: (WCAG 2.1)</p> <p>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:</p> <ul style="list-style-type: none"> • 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. <p>Exception: The visual presentation of the additional content is controlled by the user agent and is not modified by the author.</p> <p>Note: Examples of additional content controlled by the user agent include browser tooltips created through use of the HTML title attribute.</p> <p>Note: Custom tooltips, sub-menus, and other nonmodal popups that display on hover and focus are examples of additional content covered by this criterion.</p> <p>(Level AA)</p>	<p>(N/A)</p>
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Principle 2: Operable – User interface components and navigation must be operable.

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: 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: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.
(Level A)

Pass (H)

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 (H)

Keyboard (No Exception):

2.1.3 All [functionality](#) of the content is operable through a [keyboard interface](#) without requiring specific timings for individual keystrokes.
(Level AAA)

Out of scope



<p>Character Key Shortcuts: (WCAG 2.1)</p> <p>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:</p> <ul style="list-style-type: none"> • 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. <p>(Level A)</p>	(N/A)
<p>Timing Adjustable:</p> <p>2.2.1 For each time limit that is set by the content, at least one of the following is true:</p> <ul style="list-style-type: none"> • Turn off: The user is allowed to turn off the time limit before encountering it; • 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; • 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; • 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; • Essential Exception: The time limit is essential and extending it would invalidate the activity; • 20 Hour Exception: The time limit is longer than 20 hours. <p>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.</p> <p>(Level A)</p>	(N/A)



<p>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</p> <ul style="list-style-type: none"> • 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. <p>Note: For requirements related to flickering or flashing content, refer to Guideline 2.3.</p> <p>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.</p> <p>Note: 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.</p> <p>Note: 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.</p> <p>(Level A)</p>	(N/A)
<p>No Timing: 2.2.3 Timing is not an essential part of the event or activity presented by the content, except for non-interactive synchronized media and real-time events. (Level AAA)</p>	Out of scope



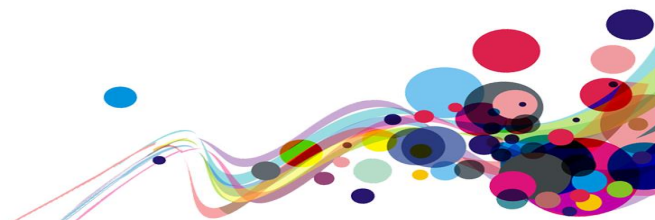
<p>Interruptions: 2.2.4 Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA)</p>	Out of scope
<p>Re-authenticating: 2.2.5 When an authenticated session expires, the user can continue the activity without loss of data after re-authenticating. (Level AAA)</p>	Out of scope
<p>Timeouts: (WCAG 2.1) 2.2.6 Users are warned of the duration of any user inactivity that could cause data loss, unless the data is preserved for more than 20 hours when the user does not take any actions. Note: Privacy regulations may require explicit user consent before user identification has been authenticated and before user data is preserved. In cases where the user is a minor, explicit consent may not be solicited in most jurisdictions, countries or regions. Consultation with privacy professionals and legal counsel is advised when considering data preservation as an approach to satisfy this success criterion. (Level AAA)</p>	Out of scope
<p>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)</p>	Pass (H)
<p>Three Flashes: 2.3.2 Web pages do not contain anything that flashes more than three times in any one-second period. (Level AAA)</p>	Out of scope



Animation from Interactions: (WCAG 2.1) 2.3.3 Motion animation triggered by interaction can be disabled, unless the animation is essential to the functionality or the information being conveyed. (Level AAA)	Out of scope
Bypass Blocks: 2.4.1 A mechanism is available to bypass blocks of content that are repeated on multiple Web pages . (Level A)	Pass (H)
Page Titled: 2.4.2 Web pages have titles that describe topic or purpose. (Level A)	Fail (H)
Focus Order: 2.4.3 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)	Fail (H)
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 (H)
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)	Pass (M)
Headings and Labels: 2.4.6 Headings and labels describe topic or purpose. (Level AA)	Fail (M)



Focus Visible: 2.4.7 Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)	Pass (M)
Location: 2.4.8 Information about the user's location within a set of Web pages is available. (Level AAA)	Out of scope
Link Purpose (Link Only): 2.4.9 A mechanism is available to allow the purpose of each link to be identified from link text alone, except where the purpose of the link would be ambiguous to users in general . (Level AAA)	Out of scope
Section Headings: 2.4.10 Section headings are used to organize the content. Note: "Heading" is used in its general sense and includes titles and other ways to add a heading to different types of content. Note: This success criterion covers sections within writing, not user interface components . User Interface components are covered under Success Criterion 4.1.2 . (Level AAA)	Out of scope
Pointer Gestures: (WCAG 2.1) 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)	(N/A)



<p>Pointer Cancellation: (WCAG 2.1) 2.5.2 For functionality that can be operated using a single pointer, at least one of the following is true:</p> <ul style="list-style-type: none"> • 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. <p>Note: Functions that emulate a keyboard or numeric keypad key press are considered essential.</p> <p>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).</p> <p>(Level A)</p>	<p>(N/A)</p>
<p>Label in Name: (WCAG 2.1) 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.</p> <p>Note: A best practice is to have the text of the label at the start of the name.</p> <p>(Level A)</p>	<p>Fail (H)</p>



<p>Motion Actuation: (WCAG 2.1) 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:</p> <ul style="list-style-type: none"> • 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. <p>(Level A)</p>	(N/A)
<p>Target Size (WCAG 2.1): 2.5.5 The size of the target for pointer inputs is at least 44 by 44 CSS pixels except when:</p> <ul style="list-style-type: none"> • Equivalent The target is available through an equivalent link or control on the same page that is at least 44 by 44 CSS pixels; • Inline The target is in a sentence or block of text; • User Agent Control The size of the target is determined by the user agent and is not modified by the author; • Essential A particular presentation of the target is essential to the information being conveyed. <p>(Level AAA)</p>	Out of scope
<p>Concurrent Input Mechanisms (WCAG 2.1): 2.5.6 Web content does not restrict use of input modalities available on a platform except where the restriction is essential, required to ensure the security of the content, or required to respect user settings.</p> <p>(Level AAA)</p>	Out of scope



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

Language of Page: 3.1.1 The default human language of each Web page can be programmatically determined . (Level A)	Pass (H)
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)	(N/A)
Unusual Words: 3.1.3 A mechanism is available for identifying specific definitions of words or phrases used in an unusual or restricted way , including idioms and jargon . (Level AAA)	Out of scope
Abbreviations: 3.1.4 A mechanism for identifying the expanded form or meaning of abbreviations is available. (Level AAA)	Out of scope
Reading Level: 3.1.5 When text requires reading ability more advanced than the lower secondary education level after removal of proper names and titles, supplemental content , or a version that does not require reading ability more advanced than the lower secondary education level, is available. (Level AAA)	Out of scope
Pronunciation: 3.1.6 A mechanism is available for identifying specific pronunciation of words where meaning of the words, in context, is ambiguous without knowing the pronunciation. (Level AAA)	Out of scope



On Focus: 3.2.1 When any component receives focus, it does not initiate a change of context . (Level A)	Pass (H)
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)	Pass (H)
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)	Pass (M)
Consistent Identification: 3.2.4 Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)	Pass (M)
Change on Request: 3.2.5 Changes of context are initiated only by user request or a mechanism is available to turn off such changes. (Level AAA)	Out of scope
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)	(N/A)
Labels or Instructions: 3.3.2 Labels or instructions are provided when content requires user input. (Level A)	Fail (H)
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 jeopardize the security or purpose of the content. (Level AA)	(N/A)



<p>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:</p> <ul style="list-style-type: none"> • Reversible: Submissions are reversible. • Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. • Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. <p>(Level AA)</p>	(N/A)
<p>Help 3.3.5 Context-sensitive help is available.</p> <ul style="list-style-type: none"> • Provide instructions and cues in context to help inform completion and submission. <p>(Level AAA)</p>	Out of scope
<p>Error Prevention (All): 3.3.6 For Web pages that require the user to submit information, at least one of the following is true:</p> <ul style="list-style-type: none"> • Reversible: Submissions are reversible. • Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. • Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. <p>(Level AAA)</p>	Out of scope



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

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 (H)

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 (H)

Status Messages (WCAG 2.1)

4.1.3 In content implemented using mark-up 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)

(N/A)



The Process

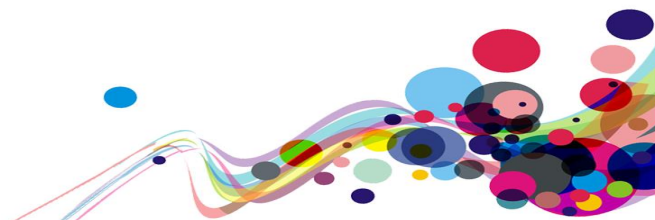
The website is measured against the Web Accessibility Initiative's (WAI) Web Content Accessibility Guidelines 2.1 (WCAG 2.1) to give an accurate feedback on any non-compliant issues. To attain our accreditation all A and AA criteria must be achieved.

To give a more accurate review of the website the DAC team employ two differing testing processes.

The first is a manual technical audit using automated tools and the second a dedicated team of user testers with differing disabilities test using a range of adaptive technologies. The findings of both testing teams are then combined to give the client far more accurate feedback on the website.

By using the testing team in conjunction with an automated procedure a more accurate set of results are made available.

This report combines technical auditing with disabled user feedback. The test does not list each specific area that requires change but highlights patterns of problems where they exist. Each section of the report includes a qualifying statement of pass, fail or recommendation to help developers quickly identify which parts of the website need the most urgent attention.



CRITERIA

High Priority

The digital product has one or more issues that urgently need remediation. There will be a list of actions that the developers need to address to make sure that the product is functional for users of assistive technology.

Medium Priority

The digital product has one or more issues that need remediation before meeting the WCAG 2.1 AA Standard. There will be a list of actions that the developers need to address to make sure that the product meets the expectations of the DAC testing team.

Low Priority

The digital product has one or more issues that would cause minor barriers to users of assistive technology. While not necessary to meet the WCAG 2.1 AA Standard, these issues affect users negatively and should be remediated.

Usability

The digital product may have one or more issues that could cause minor difficulties to users of assistive technology. While not necessary to meet the WCAG 2.1 AA Standard, these issues were found to hinder users.



User Testing

Manual accessibility checking was conducted by a team of disabled individuals, using a range of adaptive technologies (hardware and software designed to facilitate the use of computers by people with disabilities). This may include:

NVDA: a screen reader and application used by those who are blind.

ZoomText: a magnification application used by those with low vision.

JAWS: a screen reader used by blind people to access pages.

Dragon Naturally Speaking: voice activated software used by those that do not use a conventional input device such as a keyboard or mouse.

Switch Access: used by those with severe mobility impairments to input commands to a computer.

Keyboard Only: some users with mobility impairments have difficulty making precise movements required by pointing devices such as a mouse; therefore, a keyboard is used as the exclusive input device.

Readability: Manual checks were made to assess the suitability of a page for those with colour blindness and dyslexia.

Deaf/Hard of hearing: Manual checks were made to assess the suitability of a page for those with hearing impairments.

Learning difficulties: Manual checks were made to assess the suitability of a page for those with learning difficulties.

Reflow: tests with screen size of 1280 x 1024px, at 400% browser magnification

Text Spacing: tests with larger Line height, and larger Paragraph, Word and Letter spacing.

Technical Auditing

Technical auditing involves the experienced application of a number of technical auditing and standards compliance assessment tools. This combined with an extensive knowledge of WCAG, its application and wider global practice provides the DAC service with further credibility and quality.

