Fact sheet
Accessibility
Web tests

E-Accessibility Solutions for Everyone

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Orange guidelines :

https://a11y-guidelines.orange.com/en/

Automatic tests

Start with automatic tests for :

- Identify **basic errors** as soon as possible, such as the presence of unlabeled form fields, table with no headers…
- Ensure a **clean foundation** (50 to 60% of detected errors)

Tools to help you : **Axe DevTools**

Relevance tests

Follow up with the relevance of the content.

The page title

Each page must have a title presenting its content

```
<head>
 <title> Page title – Name of site </title>
</head>
```

Section titles

Check the structure of the pages and identify the titles. Check that titles use <h1> to <h6> tags and **fit together logically**.

```
<h1> Home - Orange </h1>
        <h2> News </h2>
```

Tools to help you : **Wave onglet structure**

Relevance of text alternatives

Check that images have a relevant **alt** attribute.
Images carrying information :

```
<img alt="Back to home" src="logo.png">
```

Decorative images :

```
<img alt="" src="screen101.png">
```

Tools to help you : **bookmarklet list-image, a11y.css**

Labels for links and buttons

Check that the labels of links or buttons contain at least the text present visually.
Example of error :

```
<button aria-label=”Valid”>Submit</button >
```

Tools to help you : **bookmarklet list-link, list-bouton**

HTML semantics

Check that the page uses the correct semantics to present its conten, for example :

- **<ol>** or **<ul>** and **<li>** for lists
- **Links** (**<a>)** allow you to go to another URL
- **Buttons** allow you to perform an action on the page

The accessible name of the components

Check the accessible name of the components (information vocalized by the screen reader)
Tools to help you : **bookmarklet Andi**

Language changes

If language changes are present on the page, check that they are clearly indicated.

```
<span lang="fr">Français<span>
```

Manual tests

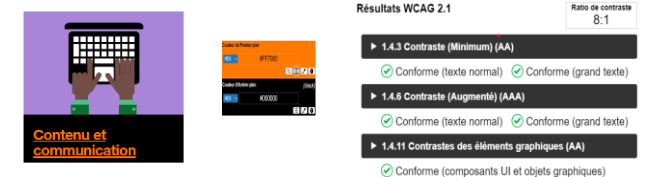Continue with manual testing.

Check colors contrast

Check that there is sufficient contrast between the color of the text and that of the background.

The contrast between the text and the background color must respect the following ratios :

- **4.5/1 min.**, for standard text, less than 24px.
- **3/1 min.**, for large text, greater than 24px (or 19px if the text is bold)

To test the contrast between the foreground and the background, you can use **Colour Contrast Analyser**.
https://www.tpgi.com/color-contrast-checker/

Do not use color as the unique source of information

Check that color is not the only means used to convey information

The first example is invalid because only color is used to convey information

The second is valid because in addition to the color, the information is also transmitted by the shape

Keyboard navigation

- All functionality available with the mouse must also be available with the keyboard
- The focus must be always visible
- Focus should move in a logical and consistent order without keyboard trap
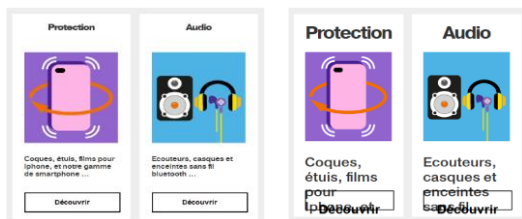
Main keys :

- **TAB / Shift + TAB** : move the focus (forward/backward).
- **Enter** : activate the focused element (link, button …)
- **Space bar** : check/uncheck a checkbox
- **Directional arrow** : to modify the selection of the radio buttons, to move in dropdown list …

Zoom text to 200%

To check that the layout is suitable for user, for example in Firefox :

- Go to View > Zoom > Zoom text only
- Increase zoom level up to 200%

Check the page layout, the must be no loss of information, or unusable features.

Responsive design

Your website should verify that :

- Allow text spacing
- The content adapts to the screen width without horizontal scrolling (except in special cases : map, table, etc).
- The click zones are large enough (24px by 24px)

Tools to help you : **a11y.css**

Screen readers navigation

A screen reader is text-to-speech software useb by people with visual impairments to transcribe what is displayed on the screen.

Some screen readers to test your websites :

- For Windows, **NVDA** and **Jaws** (paying)
- For MacOs and IOS, **VoiceOver**
- For Android, **Talkback**

List of main shortcuts to use **NVDA** :

- **Up arrow** and **Down arrow** to go to the next or the prior line.
- **INS + F7** to display the heading list, link list, buttons
- **Ctrl** to mute NVDA
- **H** and **Shift + H** to go to the next or previous heading

Continuous integration testing

To avoid regressions, some tools allow continuous integration testing.

Lightouse CI

A suite of free tools that help to prevent accessibility regressions. An easily installable GitHub Action

Axe Monitor

Will dynamically analyse, monitor and report the accessibility status of all your sites.

Useful links

Screen readers

- For Windows : **NVDA** (https://www.nvda-fr.org/) and **Jaws** (https://www.freedomscientific.com)
- For MacOS and IOS, **VoiceOver** (integrate into the system)

Colour contrast Analyser

Very complete tool to check the level of contrast.
https://www.tpgi.com/color-contrast-checker/

Axe Dev Tools

Extensions available for Firefox and Chrome
http://bit.ly/aXe-Firefox and http://bit.ly/aXe-Chrome

Wave

To perform accessibility tests :
https://wave.webaim.org/extension/

Liste de bookmarklets

A selection of bookmarklets that could help you :
https://a11y-tools.com/bookmarklets/
https://www.ssa.gov/accessibility/andi/help/install.html

a11y.css

A very practical extension :
https://ffoodd.github.io/a11y.css/

Lightouse CI

GitHub Action that will prevent accessibility regressions
https://github.com/GoogleChrome/lighthouse-ci

Axe Monitor

https://www.deque.com/axe/monitor/

Va11ydette

Orange checklist to check the accessibility of your site
https://la-va11ydette.orange.com/

Orange Digital Accessibility

Guidelines, tools and good practices on accessibility, offered by **EASE**
https://a11y-guidelines.orange.com