

## Accessibility research 'Ximmio (Westland)' app for iOS

#### Client

DigiToegankelijk TOP (in connection with the implementation of the Ceder motion on behalf of the Ministry BZK)

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## **Executive summary**

Abra has carried out accessibility research on behalf of DigiToegankelijk TOP (in connection with the implementation of the Ceder motion on behalf of the Ministry BZK). We have selected 8 screens through a structured sample. We have checked whether these screens comply with the EN 301 549 standard. This standard references 44 success criteria from the WCAG 2.1.

- We found 31 problems on 8 screens.
- The app passes 30 of the 44 succes criteria.
- The app does not pass the following success criteria:
  - 1. 🖾 Succes Criterion 1.1.1 Non-text Content
  - 2. 🔳 Succes Criterion 1.3.1 Info and Relationships
  - 3. AA Succes Criterion 1.4.4 Resize text
  - 4. Ţ Succes Criterion 1.4.5 Images of Text
  - 5. 👾 Succes Criterion 1.4.11 Non-text Contrast
  - 6. 📾 Succes Criterion 2.1.1 Keyboard
  - 7. 😤 Succes Criterion 2.4.3 Focus Order
  - 8. 💿 Succes Criterion 2.4.7 Focus Visible
  - 9. 🖰 Succes Criterion 2.5.1 Pointer Gestures
  - 10. 🗷 Succes Criterion 2.5.3 Label in Name
  - 11. 🗟 Succes Criterion 3.2.2 On Input
  - 12. 📇 Succes Criterion 3.3.2 Labels or Instructions
  - 13. 🙄 Succes Criterion 4.1.2 Name, Role, Value
  - 14. 🔮 Succes Criterion 4.1.3 Status Messages

In the 4th evaluation the Ximmio team updated parts of the app. 12 issues have been solved/ are not available any more, 12 issues have not been solved. 13 new issues have been added and we were not able tot test 8 issues. We will test them the next audit.

In this third evaluation the Ximmio development team has solved 29 issues, 14 remain unsolved, and 17 new issues are new.

Feedback report 2: Key areas of attention include navigation using point gestures, input fields, and accessibility with an external keyboard. Additionally, a variety of issues of

different natures were identified. Ensure that the screen can be navigated both by swiping in sequence and by point gesture. Also, ensure that the input fields have a visible name, which is programmatically linked to the field; a correct role; and that placeholder text (if different from the field name) is read by screen readers. Furthermore, all interactive elements should be focusable and navigable with an external keyboard.

Please note that some issues, though mentioned only once, are present on multiple screens. Check all screens for the reported issues.

Questions about this report can be asked via info@abra.nl . On our website abra.nl . you can read more about our services.

## 1. Introduction

Abra has carried out accessibility research on behalf of DigiToegankelijk TOP (in connection with the implementation of the Ceder motion on behalf of the Ministry BZK). The evaluation method WCAG-EM was used, unless not applicable, in which case Appt-EM was used. We investigated whether the app complies with the EN 301 549 standard. This standard contains 44 success criteria from the WCAG 2.1 guidelines.

#### WCAG

WCAG stands for Web Content Accessibility Guidelines. The guideline was originally created for websites, but can also partly be applied to apps. Version 2.1 of the WCAG consists of 4 principles, 13 guidelines and 78 success criteria. The success criteria are divided into three levels: A, AA and AAA. Level A consists of 30 success criteria, level AA of 20 success criteria and level AAA of 28 success criteria. To meet level AA you must also meet level A.

#### EN 301 549

EN 301 549 is the European standard for digital accessibility. We applied version 3.2.1 of this standard for this research. Apps fall under the 'Software' chapter. For apps, 44 of the 50 success criteria from level A and AA of the WCAG 2.1 apply. Minor adjustments have been made to the notes or definitions for 13 success criteria, often keeping the context the same. The following success criteria are not mandatory for apps: 2.4.1, 2.4.2, 2.4.5, 3.1.2, 3.2.3 and 3.2.4.

#### **Accessibility statement**

Government agencies are required by law to optimize the accessibility of their apps. They are held accountable for how far they have progressed. For that accountability, government agencies must make and upload an <u>accessibility statement</u>. This report gives a good overview of the level of accessibility.

#### Support

Abra supports organizations that want to improve the accessibility of their apps. We provide services and software to improve the accessibility of apps. Our reports always contain solutions specifically for apps.

Questions about this report can be asked via info@abra.nl 🗹. On our website abra.nl 🗹 you can read more about our services.

## 2. Research

Abra has carried out accessibility research on behalf of DigiToegankelijk TOP (in connection with the implementation of the Ceder motion on behalf of the Ministry BZK). This are the details:

#### App name

Ximmio (Westland)

**Operating system** iOS

**Tested version** 2.1.0 (15)

**Installation method** Via Testflight

**Research type** WCAG 2.1 level AA

Applied standard EN 301 549 같 with WCAG 2.1 같

Research method WCAG-EM <sup>I</sup> and <u>Appt-EM</u> <sup>I</sup>

#### Client

DigiToegankelijk TOP (in connection with the implementation of the Ceder motion on behalf of the Ministry BZK)

**Researcher** Tanya van Workum

**Reviewer** Paul van Workum

#### Date

12 juli 2024

## 2.1. Scope

The research is based on a structured sample. Part of the app has been selected to draw conclusions about the entire app. Problems that occur several times on a screen might only be described once.

Overview of the	selected screens
-----------------	------------------

Nr	Screen Path		
1	Beginscherm	> Welkom > Home	
2	Onboarding: Postcode Beginscherm > Welkom > Home		
3	Afvalkalender	Home > Afvalkalender	
4	Containerlocaties Home > Containerlocaties		
5	Afvalwijzer	Home > Afvalwijzer	
6	Informatie	Home > Informatie	
7	Instellingen Home > Instellingen		
8	Berichten	ichten Home > Berichten	

#### 2.2. Devices

The following devices were used during the research:

• iPhone SE (iOS versie 17.5)

#### 2.3. Techniques

The app has been developed with the following techniques:

• Flutter

## 3. Results

The research shows that the 'Ximmio (Westland)' app meets 30 of the 44 success criteria from the guideline.

Results	per success criterion
---------	-----------------------

Success cri- terion	Level	Title	Result
🛃 1.1.1	A	Non-text Content	🔀 Does not pass
<u> </u>	A	Audio-only and Video-only (Prerecorded)	Passes
🍋 1.2.2	A	Captions (Prerecorded)	Passes
1.2.3 ( <sup>40)</sup>	A	Audio Description or Media Alternative (Prerecorded)	Passes
1.2.4	AA	Captions (Live)	Passes
مە) 1.2.5	AA	Audio Description (Prerecorded)	Passes
≣ 1.3.1	A	Info and Relationships	Ooes not pass
°;≎ 1.3.2	A	Meaningful Sequence	Passes
<u>¥</u> 1.3.3	A	Sensory Characteristics	Passes
	AA	Orientation	Passes
☞==⊚ 1.3.5	AA	Identify Input Purpose	Passes
℘ 1.4.1	A	Use of Color	Passes
@ 1.4.2	A	Audio Control	Passes
<sub>⊤</sub> ‡ 1.4.3	AA	Contrast (Minimum)	Passes
₄A 1.4.4	AA	Resize text	Ooes not pass
<u>ू</u> ैं 1.4.5	AA	Images of Text	🗴 Does not pass

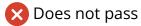
Success cri- terion	Level	Title	Result
	AA	Reflow	Passes
-ჶ- 1.4.11	AA	Non-text Contrast	🔀 Does not pass
<u>Å</u> ‡ 1.4.12	AA	Text Spacing	Passes
를 1.4.13	AA	Content on Hover or Focus	Passes
له 2.1.1 ⊡	A	Keyboard	🔀 Does not pass
له 2.1.2 ₪	A	No Keyboard Trap	Passes
A 2.1.4	A	Character Key Shortcuts	Passes
(J <sub>₽</sub> 2.2.1	A	Timing Adjustable	Passes
<sup>(O)</sup> 2.2.2	A	Pause, Stop, Hide	Passes
≹ 2.3.1	A	Three Flashes or Below Threshold	Passes
2.4.3	A	Focus Order	🔀 Does not pass
[] 2.4.4	A	Link Purpose (In Context)	Passes
団 2.4.6	AA	Headings and Labels	Passes
@] 2.4.7	AA	Focus Visible	🔀 Does not pass
டு 2.5.1	A	Pointer Gestures	🔀 Does not pass
🕅 2.5.2	A	Pointer Cancellation	Passes
2.5.3	A	Label in Name	🔀 Does not pass
"ਊ 2.5.4	A	Motion Actuation	Passes
贵 3.1.1	AA	Language of Page	Passes
ത് 3.2.1	А	On Focus	Passes

Success cri- terion	Level	Title	Result
₿ 3.2.2	А	On Input	🔀 Does not pass
<b>≙</b> 3.3.1	А	Error Identification	✓ Passes
<sup>№</sup> 3.3.2	А	Labels or Instructions	🔀 Does not pass
æ 3.3.3	AA	Error Suggestion	Passes
<u>⊚</u> 3.3.4	AA	Error Prevention (Legal, Financial, Data)	✓ Passes
4.1.1	А	Parsing	Passes
<b>4.1.2</b>	А	Name, Role, Value	🗴 Does not pass
<b>@</b> 4.1.3	AA	Status Messages	🗴 Does not pass

The following pages contain an explanation of each success criterion and an overview of the findings.

#### 🖂 Succes Criterion 1.1.1 - Non-text Content

Ensure that alternative text is available for all content without text. These include images, icons and graphs. Describe what there is to see. People who are blind have this description read aloud through their screen reader. Alternative text can also be useful for anyone who is unsure about the meaning of the content.



#### Solution for success criterion 1.1.1 ⊿

Nr	Screen	Problem	Screenshot
1	Onboarding: Postcode	The decorative image is read aloud by the screen reader. Make sure all decorative images are hidden. The decorative background image gets focus but does not have a label. The images still get focus. But are ob- scured by the input fields. Also con- trast of "Eierdoos" is insufficient, text is not scaling and "Een schone wereld" is not visible at all and the focus boarder of the screen reader is not visible.	iPod <b>©</b> 09:16 <b>() () () () () () () ()</b>

Nr	Screen	Problem	Screenshot
2	Onboarding: Postcode	The meaningful image has no label. Make sure the screen reader can read the meaning of this image. The checkbox provides information that this adres will be selected. "Ges- electeerd: Wegedoornpad 16"	Geen simkaart        10:43         Postcode         2691       EW         Huisnummer         16         Controleren         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder
3	Container- locaties	The menu button has the label: "Navi- gationmenu openenNavigationmenu openen". Make sure it only an- nounces the label once.	Ceen sinkaart Containerlocaties

# **EVALUATE:** Succes Criterion 1.2.1 - Audio-only and Video-only (Prerecorded)

Ensure a transcript is provided when information is only conveyed by audio or images. With podcasts, the information is conveyed only through audio. People who are deaf cannot hear what is being said. In animation films, the information is often only conveyed through images. People who are blind cannot see the images. By making a transcript available, the information can be read instead.



Additional information about success criterion 1.2.1

#### 🚔 Succes Criterion 1.2.2 - Captions (Prerecorded)

Ensure captions are provided for all videos with sound. People who are hard of hearing, deaf or deafblind depend on captions to understand what is being said. Captions are also useful for anyone who is temporarily unable to perceive sound, for example inside a quiet zone.



Additional information about success criterion 1.2.2

#### **Succes Criterion 1.2.3 - Audio Description or** Media Alternative (Prerecorded)

Ensure a transcript or audio description is provided for videos where you can't hear what is displayed. The content can then be read in case of a transcript, or heard in case of audio description. If you choose to add a audio description, you also meet success criterion 1.2.5.



Additional information about success criterion 1.2.3

#### Succes Criterion 1.2.4 - Captions (Live)

Ensure real-time captions are available for all live videos with audio. This allows people who need subtitles to directly access the spoken information.



Additional information about success criterion 1.2.4

## AD» Succes Criterion 1.2.5 - Audio Description (Prerecorded)

Ensure audio description is available when important information is shown which you cannot hear. An extra sound track must be provided where where the visual information is described. This allows people who are blind or have difficulty processing visual information to also understand the content.



Additional information about success criterion 1.2.5 2

#### Succes Criterion 1.3.1 - Info and Relationships

Ensure that the information and relationships on the screen are not only conveyed visually.

Information on the screen must be conveyed to assistive technologies. For example, make sure that headings are not only bold, but also marked as headings in the code.

Relationships on the screen must be usable with assistive technologies. Elements in a list must be navigable one by one. Elements in a table must be navigable by rows and columns.

🗙 Does not pass

Solution for success criterion 1.3.1 ₫

Nr	Screen	Problem	Screenshot
4	Container- locaties	On this screen, there are headings that are not marked-up as headings. Make sure that assistive technology recognizes headings as headings. Also the focus indicator is around the whole screen. Try to put it only around the heading "Afvalsoorten".	Ceen simkaart     Containerlocaties     Afvalsoorten

Nr	Screen	Problem	Screenshot
5	Container- locaties	The label is not programmatically as- sociated with the related input field. Make sure that by selecting an input field, the screen reader reads the la- bel. It concerns the label 'Zoeken op adres of afvalgroep'. This label should be programmatically associated with the input field to enable navigation with Voice Control. Ensure that the input field has a name that is both visible and pro- grammatically associated with it, a correct role, and that the placeholder text is read aloud by the screenread- er. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Not able to check in V4.	Geen simkaart 19:41     CONTAINERLOCATIES     I     Coeken op adres of afvalgroup     Vul hier een adres in     Containers in mijn buurt     I     Glas   Beatrixstraat     I     Glas   Beatrixstraat     I   Glas   Beatrixstraat     I   I     I     Vul hier een adres in
6	Afvalwijzer	On this screen, there are headings that are not marked-up as headings. Make sure that assistive technology recognizes headings as headings. It is about the bold headings: "Wat wel/wat niet?" and "Wel" and "Niet" etc.	IPod        10:16       Image: Comparison of the second se

### $_{440}^{\circ,\circ}$ Succes Criterion 1.3.2 - Meaningful Sequence

Ensure that the order which assistive technologies follow reflect the meaning of the content. Otherwise, users of assistive technology may misunderstand the content. Most content is presented from left to right, from top to bottom. The information should also be presented to users of assistive technologies in this way.



Additional information about success criterion 1.3.2 2

#### \*

#### **Succes Criterion 1.3.3 - Sensory Characteristics**

Ensure instructions can be understood by everyone. Instructions that only use shape, size, location, orientation or sound are not understandable for everyone. For example, people who are blind cannot see shape. Combine multiple properties to allow everyone to understand the instructions.



Additional information about success criterion 1.3.3

#### 📜 Succes Criterion 1.3.4 - Orientation

Ensure that the screen content rotates with the device display. All screens of an app must be usable in all orientations. Users in wheelchairs sometimes have their device mounted horizontally. People who use an enlarged font also often rotate their device so that more words fit on the screen.



Additional information about success criterion 1.3.4 2

#### 🚥 Succes Criterion 1.3.5 - Identify Input Purpose

Ensure it is clear what information is expected from users inside input fields. Set the correct input type to allow auto-completion, e.g. for e-mail addresses. This is faster for everyone and prevents errors for users of assistive technology.



Additional information about success criterion 1.3.5 2

#### **Succes Criterion 1.4.1 - Use of Color**

Ensure colour isn't the only way information is conveyed. Information which is conveyed only by colour cannot be perceived by everyone. For example, also use shape to give instructions, e.g. reference a green checkmark or red cross. Inside a legend, use numbers in addition to colour, to allow people who are colour blind to find what they are looking for.



Additional information about success criterion 1.4.1

#### 🛞 Succes Criterion 1.4.2 - Audio Control

Ensure that audio which lasts longer than three seconds can be paused or stopped. It is disturbing if audio cannot be paused, especially for people who use a screen reader. As a result, they can no longer hear the screen reader's voice properly. For people who have difficulty concentrating, it is also nice if audio can be paused. This allows them to focus better on the other information.



Additional information about success criterion 1.4.2

#### T<sup>®</sup> Succes Criterion 1.4.3 - Contrast (Minimum)

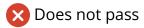
Ensure that the contrast ratio between the text colour and background colour is at least 4.5:1. For bold and large text, a ratio of 3:1 is sufficient. By maintaining these ratios, visually impaired and colour blind users can usually read the text well. In addition, this makes an app easier for everyone to use, for example outside in the sun.



Additional information about success criterion 1.4.3

#### AA Succes Criterion 1.4.4 - Resize text

Ensure that the text in your app supports resizing. Users specify their preferred font size in the system settings. Text in your app should resize according to the preferred font size. This is especially important for visually impaired users because otherwise they might not be able to read the text. Text should not be abbreviated with dots.



#### Solution for success criterion 1.4.4 ⊿

Nr	Screen	Problem	Scr	een	sho	t			
7	Afvalkalen- der	(Parts of) text on this screen are no longer visible when the text is magni-	Geen si	mkaart 🗢		10:47 alend	ler		<b>(</b>
		fied to 200%. Make sure that all text remains available to users who use the app with an enlarged text.		ankomende phaaldagen					
		lt is about "2024".	•	se	pte	mb	er		•
		The screen reader is not able to move	ma	di	wo	do	vr	za	zo
		focus to the dates in the table. Make	26	27	28	29	30	31	1
		sure all information in the table has	2	3	4	5	6	7	8
		an alternative. Currently we were not	9	10	11	12	13	14	15
		able to test this as there were no	16	17	18	19	20	21	22
		pick-up dates.	23	24	25	26	27	28	29
				se	pter	nbe	r <mark>20</mark>	24	

Nr	Screen	Problem	Screenshot
8	Container-The text that is pinned to the screenlocatiescovers other text. Make sure the texts		Geen simkaart 🗢 11:00 1 🕬
	do not cover each other.	Afvalsoorten	
		"PMD" is below the button "An- nuleren".	📄 Restafval 🛛 🔷
			🕅 GFT 🕟
			🛐 Papier 🛛 🗢
			🗓 Glas 🛛 🗢
			Textiel
			PMD
9	Container- locaties	The text that is pinned to the screen covers other text. Make sure the texts	Geen simkaart 🗢 20:04 🕈 🕞 CONTAINERLOCATIES
		do not cover each other.	
		This concerns the error message.	Zoeken op adres of afvalgroup
		Not able to check in V4.	٩
			Het adres dat bij deze postcode en huisnummer hoort is ongeldig of onbekend, controleer uw postoedexenuw ingereed

## ार्गे Succes Criterion 1.4.5 - Images of Text

Ensure images are not used to display text. Always use plain text to allow the text to be adapted to the user's preferences. The font size inside an image often scales to a limited extent or not at all. As a result, the text cannot be read by everyone.

Exception: If an image of text does scale or if text as image is specifically needed to convey information.

🔀 Does not pass

Nr	Screen	Problem	Screenshot
10	Onboarding: Postcode	The text from the image is not of- fered as plain text on the screen and therefore cannot be adjusted by the user. Make sure that the user can ad- just text to their needs. The background image contains text which screen reader users will miss. It's important to ensure this text is ac- cessible to all users. Also in landscape modus part of the text is missing. Tip. Do not use text in an image. It re- sults in multiple issues.	<page-header><section-header></section-header></page-header>

Solution for success criterion 1.4.5 ⊿

#### **EA** Succes Criterion 1.4.10 - Reflow

Ensure that all content on the screen remains readable even with the largest font. Content should be readable without having to scroll in two directions. Because the text is displayed larger, it can push other elements off the screen. Ensure content can still be reached, for example, by scrolling vertically.



Additional information about success criterion 1.4.10

### - Succes Criterion 1.4.11 - Non-text Contrast

Ensure that the content on the screen has a contrast of at least 3:1 with the surrounding colour. Think of graphic elements such as icons, buttons and input fields. By keeping this ratio, visually impaired and colour blind users can distinguish the content well. In addition, this makes an app easier for everyone to use, for example outside in the sun.

🔀 Does not pass

#### Solution for success criterion 1.4.11

Nr	Screen	Problem	Screenshot		
11	Container- locaties		Geen simkaart  Geen simkaartContainerlocaties		
		a minimum contrast of 3.0:1.	Afvalsoorten		
		It is about the contrast of the toggle in unselected state.	🗎 Restafval 🔹		
		in unscielled state.			GFT 💽
				🛐 Papier 🛛 🗢	
			🚹 Glas 🔷		
			Textiel • ANNULEREN		
			Schakelknop, uit		

Nr	Screen	Problem	Screenshot
12	Container- locaties	The contrast of interface elements on this screen is less than 3.0:1. Provide a minimum contrast of 3.0:1. It concerns search icon. Contrast is 2.67:1. Suggestion: The label of the input field has a spelling mistake - "Afval- groUp" (U instead of E) Not able to check in V4.	Gene sinkaart • 19:41     CONTAINERLOCATIES     CONTAINERLOCATIES     Coeken op adres of afvalgroup     Vul hier een adres in     Containers in mijn buurt     Glas   Beatrixstraat     Papier   Beatrixstraat     Glas   Beatrixstraat     Colas   Beatrixstraat     Cul hier een adres in

#### $\frac{A}{\Delta \uparrow}$ Succes Criterion 1.4.12 - Text Spacing

Ensure there is enough space between paragraphs, letters and words. People with dyslexia can read faster as a result. People who are visually impaired can also read the text more easily. White space can also help people with a cognitive impairment to distinguish parts from each other.



Additional information about success criterion 1.4.12

#### Succes Criterion 1.4.13 - Content on Hover or

#### Focus

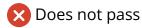
Ensure it possible to hide content which appears automatically when touching an element. It often happens that an element is touched accidentally. If new content appears, it may affect the completion of a task. Automatic content mainly causes problems for users of assistive technologies.



Additional information about success criterion 1.4.13

#### i Succes Criterion 2.1.1 - Keyboard

Ensure that all functionality in the app can be used with assistive technologies. People who are blind use the screen reader. People with a motor disability use switch control, voice control and/or the keyboard. These assistive technologies are built into the operating system.



#### Solution for success criterion 2.1.1

Nr	Screen	Problem	Screenshot
13	Afvalkalen- der	The screen/parts of the screen can- not be operated with an external key- board. Make sure that all functionali- ty is available using an external key- board. The menu cannot be reached with an external keyboard. The external keyboard is not working in the app at all. This issue occurs on all the screens.	Pod <
14	Container- locaties	The screen/parts of the screen can- not be operated with an external key- board. Make sure that all functionali- ty is available using an external key- board. Search field is not focusable and not editable in landscape mode. Not able to check in V4.	<ul> <li>CONTAINERLOCATIES</li> <li>Coeken op adres of afvalgroup</li> <li>Vul hier een adres in</li> <li>Containers in mijn buurt</li> <li>Panier</li> <li>Zoeken op adres of afvalgroup, <u>Koptekst</u></li> </ul>

#### 📷 Succes Criterion 2.1.2 - No Keyboard Trap

Ensure users of assistive technologies can't get stuck anywhere in the app. It is especially common that overlays cannot be closed. Many assistive technologies do not support clicking next to an overlay. As a result, the user gets stuck. You must include a close button which assistive technologies can activate.



Additional information about success criterion 2.1.2

#### Succes Criterion 2.1.4 - Character Key Shortcuts

Ensure that shortcuts cannot be accidentally activated when using assistive technologies. Many assistive technologies mimic keystrokes to perform actions. This can result in unwanted shortcuts being activated. Make it possible to change or disable shortcuts.



Additional information about success criterion 2.1.4 2

#### (Je Succes Criterion 2.2.1 - Timing Adjustable

Ensure everyone has enough time to complete tasks. People with disabilities sometimes need more time to navigate through a screen. Operating an app with assistive technologies is often slower compared to touch. People with learning disabilities, dyslexia and cognitive impairments may also need more time. If there are time limits, then the time limit should be adjustable. It's best to make sure there are no time limits.

Passes

Additional information about success criterion 2.2.1

## O Succes Criterion 2.2.2 - Pause, Stop, Hide

Ensure it is possible to pause, stop or hide moving parts on the screen. Users of assistive technologies may find it difficult to use animated elements. After pausing or stopping animations, interaction is often possible. Flashing content makes it more difficult for people with attention disorders to stay focused. Hiding the distracting content makes it easier for them to use an app.



Additional information about success criterion 2.2.2

## Succes Criterion 2.3.1 - Three Flashes or Below Threshold

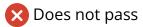
Ensure no more than three flashes per second are shown anywhere in the app. This can cause an epileptic seizure. Warnings do not work well, because they are often overlooked. This is especially the case with children who cannot read yet.



Additional information about success criterion 2.3.1

#### Succes Criterion 2.4.3 - Focus Order

Ensure assistive technologies use a logical focus order when navigating. The order of navigating a screen is usually from left to right, from top to bottom. Make sure assistive technologies use an equivalent focus order. The difference with success criterion 1.3.2 is that this only concerns the focus order.



#### Solution for success criterion 2.4.3 ⊿

Nr	Screen	Problem	Screenshot
15	Container- locaties	The focus order of the elements on the screen is not the same as the vi- sual order of the elements. Ensure that the screen is read by assistive technology in the same order as the visual order of elements. The focus goes to "Er zijn geen con- tainers in de buurt" and only then to the heading " Containers in mijn bu- urt". The focus of the first element is the complete screen and potentially the reason for announcing it first.	Ceen simkaart        11:15       Image: Container locaties         Image: Containers in mijn buurt         Containers in mijn buurt         Er zijn geen containers in de buurt
			ners in de <mark>buurt</mark>

**Succes Criterion 2.4.4 - Link Purpose (In Context)** 

Ensure links are clear without the surrounding content. Users of assistive technologies can request an overview of all links on the screen. It is important that the purpose of each link is clear. A common mistake is to name a link 'here'. Without the surrounding text it is not clear what you will read more about.

Passes

Additional information about success criterion 2.4.4 2

#### **TE Succes Criterion 2.4.6 - Headings and Labels**

Ensure to use descriptive headings and labels.

Descriptive headings are important to understand how the content is constructed. Blind users can navigate through headings using a screen reader.

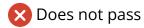
Descriptive labels help users identify content. Voice control users speak the labels to perform actions.



Additional information about success criterion 2.4.6



Ensure that elements focused by assistive technologies are clearly indicated. Focus is often shown by placing a box around the element. Make sure that the placement is correct and that the colour is clearly visible. For apps it is not possible to adjust the colour of the frame. However, it is possible to give elements a different background colour when they have focus.



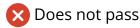
#### Solution for success criterion 2.4.7 ⊿

Nr	Screen	Problem	Screenshot
16	Container- locaties	The focus lands on invisible elements. Make sure that the focus only lands	Geen simkaart ? 20:02 T CONTANERLOCATIES
		on visible elements.	Ω
		The visible focus frame for the 'Zoekveld leegmaken' button should be around the respective button. Cur- rently, it is positioned in the wrong place.	Zoeken op adres of afvalgroup
			rently, it is positioned in the wrong
		Not able to check in V4.	Containers in mijn buurt
			PMD Burgemeester Hoogenboomstraa t ekveld leegmaken, Knop

Nr	Screen	Problem	Screenshot	
17	Instellingen	The focus lands on invisible elements. Make sure that the focus only lands on visible elements. When navigating with swiping ges- tures, after 'Instellingen', the whole screen receives focus, but the screen reader does not announce anything. Ensure that all visible elements re- ceive focus and are announced by the screen reader. Elements should receive focus in the correct order when navigating sequentially, and all elements should be focusable when navigating with point gestures. Cur- rently, it is only possible to navigate sequentially by swiping.	Geen simkaart •       12         ■       INSTEL         Uw adresge       Postcode         2691       Huisnumme         16       Contr         Wegedoo       2691EW s         Gravenza       Gravenza	EW r oleren ornpad 16

## 🖱 Succes Criterion 2.5.1 - Pointer Gestures

Ensure an alternative is provided for all gesture-triggered actions. People with a motor disability cannot perform all gestures. For example, not everyone is able to move two fingers apart to zoom. Add an alternative, such as a button, to allow users to zoom in without gestures.



#### Solution for success criterion 2.5.1 2

Nr	Screen	Problem	Screenshot
18	Afvalwijzer	There is no alternative for the pointer gestures. Make sure that all function- ality can also be used without using (multiple) fingers, for example by of- fering extra buttons. It is possible to navigate through the text only by swiping sequentially. Fo- cusing on a specific paragraph via touch is not possible. This means that	Geen simkaart €       11:20       IIII ●         ■       WELK AFVAL WAAR?         Onze gemeente aan huis       opgehaald. Dit gebeurt         op vaste dagen of op       afspraak. Huisvuil kunt u         ook ook zelf       wegbrengen naar een         milieustraat of naar een       milieu-eiland.
		users who rely on a screen reader and wish to listen to a middle section of the text would need to swipe through the entire text in sequence.	Restafval Wat is het? Restafval is het afval dat overblijft na het scheiden van recyclebaar afval zoals groente-, fruit- en tuinafval en etensresten (gft+e), papier, glas, textiel en plastic verpakkingen, metalen Restafval

## 🛞 Succes Criterion 2.5.2 - Pointer Cancellation

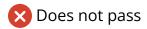
Ensure it is possible to cancel touches. Buttons may only be activated with a click and not with a touch. This gives the user the option to cancel the touch.



Additional information about success criterion 2.5.2 2

# Succes Criterion 2.5.3 - Label in Name

Ensure the technical name of elements contain the visual name. A button with the text 'Log in' must be able to be activated by voice control via this name. This is not possible if the technical name is different. For visually impaired people using a screen reader, it is also confusing when they hear a different name compared to what they see on the screen.



#### Solution for success criterion 2.5.3 🗹

Nr	Screen	Problem	Screenshot
19	Onboarding: Postcode	Because visible text on the button does not appear in the accessible name of the button, this button can- not be activated with voice. Make sure the accessible name contains the visual name.	Geen simkaart     11:19       jouw kaart       wordt       Postcode       (1234)
		Visible text label should be the same as announced by the screenreader.	Huisnummer (100)
		Please add "(1234)" as is done with the input field "Huisnummer (100)".	Controleren
			Postcode nummer, Tekstveld, Tik dubbel o

# **Succes Criterion 2.5.4 - Motion Actuation**

Ensure an alternative is provided for motion-triggered actions and make it possible to disable them. For users with limited hand function, shaking is often not possible. Provide an alternative, such as a button. For users with spasms, the actions can be triggered inadvertently. Make it possible to disable motion-triggered actions.



Additional information about success criterion 2.5.4 2

#### 🕆 Succes Criterion 3.1.1 - Language of Page

Ensure the language is set for all content. A screen reader reads all text that appears on the screen. The pronunciation of the words depends on the language that has been set. When the language is not set, or a wrong language is set, the pronunciation is unclear. A correctly set language also helps to display letters and to display subtitles.



Additional information about success criterion 3.1.1 2

#### **Succes Criterion 3.2.1 - On Focus**

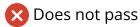
Ensure it is predictable what happens when you move the focus. When users move their finger over a button, it should not be activated unexpectedly. If the last field of a form is filled in, it should not be sent unexpectedly. These types of actions should only be performed automatically if users are notified in advance. By making focus behavior predictable, you help people with a visual, cognitive or motor impairment.



Additional information about success criterion 3.2.1 2

## Succes Criterion 3.2.2 - On Input

Ensure it is predictable what will happen when entering data. In case the focus moves automatically on correct input, this should be indicated in advance. Indicate if a new screen will be opened when submitting a form. Unexpected actions can confuse users with visual or cognitive impairments.



#### Solution for success criterion 3.2.2 🗹

Nr	Screen	Problem	Screenshot
20	Onboarding: Postcode	When the user enters data in the in- put field, the data is sent automatical- ly. Make sure the user is informed about this behavior in advance. After entering the first 4 numbers the focus automatically moves to the Postcode letter field.	Geen simkaart     Jouw kaart   jouw kaart   wordt     Postcode   (1234)   (AB)     Huisnummer     (100)     Controleren     Ostcode nummer, Tekstveld, Tik dubbel ol

## Succes Criterion 3.3.1 - Error Identification

Ensure a clear error message is shown when data has been entered incorrectly. It often happens that data is entered incorrectly. Clearly indicate which input is incorrect and explain why. It is important that error messages are also clear for user of assistive technologies. Ensure errors are also indicated in text to allow everyone to perceive them.

Passes

Additional information about success criterion 3.3.1 2

#### Succes Criterion 3.3.2 - Labels or Instructions

Ensure clear instructions are provided in places users have to input data. Add a label to the input fields, for example 'First name'. Mark whether fields are required or optional. Indicate if data must be entered in a specified order. All users benefit from clear instructions. Clear instructions are indispensable for users with cognitive impairments.

#### 🔀 Does not pass

#### Solution for success criterion 3.3.2 ⊿

Nr	Screen	Problem	Screenshot
21	Onboarding: Postcode	A specific instruction is included in the placeholder text. This information disappears when the user starts en- tering data. Make sure the label/in- struction remains visible at all times. It is about the text "(1234)" and "(AB). Consider merging the (1234) and (AB) fields to make the postal code a sin- gle field. When doing so, the "Post- code" label is sufficient. The name is added, but visually the label is not available after typing.	Postcode       09:29       Image: Text of the second secon

Nr	Screen	Problem	Screenshot
22	Instellingen	In this input field, a placeholder text serves as a label. The placeholder text disappears when a user starts to type and therefore cannot act as a la- bel. Make sure that the label always remains visible. The input fields do not have a visible label after editing.	Ceen simkaart        11:19       Image: Ceen simkaart          Instellingen         UUr         Voor meldingen         d         r         5         Versie: 2.1.0.17         1       2         ABC       DEF         4       5       6         0H1       JKL       MNO         7       8       9         PORS       TUV       WXYZ         Innummer, Tekstveld, Bev       Image: I
23	Container- locaties	In this input field, a placeholder text serves as a label. The placeholder text disappears when a user starts to type and therefore cannot act as a la- bel. Make sure that the label always remains visible. It concerns the input field 'Vul hier'. Ensure that the input field has a name that is both visible and pro- grammatically associated with it, a correct role, and that the placeholder text is read aloud by the screenread- er. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Ceen similarant e 19:41     CONTAINERLOCATIES     Image: Containers of advalgroup     Containers in mijn buurt     Image: Containers in mijn buurt </td

#### E Succes Criterion 3.3.3 - Error Suggestion

Ensure suggestions are provided when data has been entered incorrectly. Users regularly make mistakes when entering data. Help users to fix these errors by providing suggestions. For example, when a date has been entered incorrectly, indicate in which order the day, month and year are expected.



Additional information about success criterion 3.3.3

# Succes Criterion 3.3.4 - Error Prevention (Legal, Financial, Data)

Ensure data is submitted intentionally. Allows users to undo, correct or confirm a submission. At least one of these options must be provided for submissions that cause a legal obligation, financial transaction, or loss of data. These options reduce the chance of unforeseen consequences.



Additional information about success criterion 3.3.4 2

#### </> </> Succes Criterion 4.1.1 - Parsing

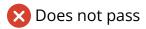
Ensure the source code of the app does not contain any errors and does not use any deprecated functions. Assistive technologies may not behave as expected when code is not updated to modern standards. Adhere to the standards of the platforms which are supported. heck that the app works on all versions of the supported operating systems.



Additional information about success criterion 4.1.1 2

# Succes Criterion 4.1.2 - Name, Role, Value

#ERROR!



#### Solution for success criterion 4.1.2

Nr	Screen	Problem	Screenshot
24	Afvalkalen- der	The accessible name of this button does not describe whether it is select- ed or not. Make sure that this infor- mation is read by the assistive tech- nology. All the buttons in the menu list have the value 'Selected'. Make sure that only the selected tab has the value 'selected'.	Wegedbormp = 0.12       12       12         2691EW s-Gravenzande       2024         Image: Containerlocaties       2024         Image: Containerlocaties
25	Afvalkalen- der	This interactive element does not have a proper role. This element looks and behaves like a button. Make sure the screen reader an- nounces the correct role of this ele- ment. In the re-audit, this was solved for al- most all the buttons in the menu, ex- cept for the 'Menu sluiten' button.	C-Wegedbarnp;=d16       12:18         2691EW s-Gravenzande       12:18         Containerlocaties       2024         Containerlocaties       2024         Meltding maken       2024         Grofvuilmelding       2024         Pbd-zakken bestellen       202         Berichten       3         Instellingen       10         Instellingen       17         Deze app is ontwikkeld en geproduceerd door Ximmio BV. Alle rechten voorbehouden.       31         Image: Menu sluiten Menu sluiten, Afbeelding       31

Nr	Screen	Problem	Screenshot
26	Container- locaties	The toggle button has no name. Group the toggle button and its label	Geen simkaart  Geen simkaart↑■Containerlocaties
		so that they can be read as one ele- ment by the assistive technology.	Afvalsoorten
			📄 Restafval 🛛 🗨
			🕅 GFT
			🛐 Papier 🛛 🗨
			🛓 Glas 🛛 🔷
		Textiel ANNULEREN	
			Schakelknop, uit
27	Container- locaties	This interactive element does not have a proper role. This element looks and behaves like a button. Make sure the screen reader an-	Geen simkaart
			Afvalsoorten
		nounces the correct role of this ele- ment.	🝈 Restafval 🔍 🗨
		It is about the button "Annuleren".	GFT 🔎
		The button Annuleren .	🔊 Papier 🛛 🗢
			🚹 Glas 🛛 🗨
			ANNULEREN

Nr	Screen	Problem	Screenshot
28	Container- locaties	This interactive element does not have a proper role. This element looks and behaves like an input field. Make sure the screen reader an- nounces the correct role of this ele- ment. It concerns the input field 'Vul hier'. Ensure that the input field has a name that is both visible and pro- grammatically associated with it, a correct role, and that the placeholder text is read aloud by the screen read- er. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Ceen simkaart •       19:41       Image: Containers logical containers of afvalgroup         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mi
29	Afvalwijzer	The value/state of a button should be obvious without changing this state. Make sure the screen reader an- nounces the value/state together with the button name. The value of the non-selected button is being announced as 'gehandicapt'.	Geen simkaart       11:53       Image: Construction of the second

#### Succes Criterion 4.1.3 - Status Messages

Ensure that status messages are also passed to assistive technologies. A blind user cannot see new information appearing anywhere on the screen. By providing a status message, the screen reader can announce that new information is available.

🗙 Does not pass

#### Solution for success criterion 4.1.3 ⊿

Nr	Screen	Problem	Screenshot
30	Onboarding: Postcode	The button triggers new content. This content receives no focus and is not read aloud. Make sure this informa- tion is accessible. After submitting the adress the focus is removed to the beginning of the screen. Also the new adress is not an- nounced by the screen reader.	Geen simkaart        10:43         Postcode         2691       EW         Huisnummer         16         Controleren         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder         Wegedoornpad 16         2691EW s-         Gravenzande

Nr	Screen	Problem	Screenshot
31	Container- locaties	The button triggers new content. This content receives no focus and is not read aloud. Make sure this informa- tion is accessible. When an incorrect street name is en- tered, an error message appears. However, the focus does not auto- matically shift to this message, and it is not read aloud by the screen read- er. Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Ceen simkaart       20:04       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties

# 4. Recommendations

To comply with the standard, the app needs to be improved on the following points:

#### 🖂 Succes Criterion 1.1.1 - Non-text Content

Ensure that alternative text is available for all content without text. These include images, icons and graphs. Describe what there is to see. People who are blind have this description read aloud through their screen reader. Alternative text can also be useful for anyone who is unsure about the meaning of the content.

- Solution for success criterion 1.1.1
- Definition of success criterion 1.1.1 ₽
- Explanation of success criterion 1.1.1

#### **Succes Criterion 1.3.1 - Info and Relationships**

Ensure that the information and relationships on the screen are not only conveyed visually.

Information on the screen must be conveyed to assistive technologies. For example, make sure that headings are not only bold, but also marked as headings in the code.

Relationships on the screen must be usable with assistive technologies. Elements in a list must be navigable one by one. Elements in a table must be navigable by rows and columns.

- Solution for success criterion 1.3.1 ☑
- Definition of success criterion 1.3.1 ₽
- Explanation of success criterion 1.3.1 ⊿

## AA Succes Criterion 1.4.4 - Resize text

Ensure that the text in your app supports resizing. Users specify their preferred font size in the system settings. Text in your app should resize according to the preferred font size. This is especially important for visually impaired users because otherwise they might not be able to read the text. Text should not be abbreviated with dots.

- Solution for success criterion 1.4.4 ⊿
- Definition of success criterion 1.4.4 🗹
- Explanation of success criterion 1.4.4 🗹

## ार्वे Succes Criterion 1.4.5 - Images of Text

Ensure images are not used to display text. Always use plain text to allow the text to be adapted to the user's preferences. The font size inside an image often scales to a limited extent or not at all. As a result, the text cannot be read by everyone.

Exception: If an image of text does scale or if text as image is specifically needed to convey information.

- Solution for success criterion 1.4.5 ☑
- Definition of success criterion 1.4.5 ⊿
- Explanation of success criterion 1.4.5 🗹

#### - Succes Criterion 1.4.11 - Non-text Contrast

Ensure that the content on the screen has a contrast of at least 3:1 with the surrounding colour. Think of graphic elements such as icons, buttons and input fields. By keeping this ratio, visually impaired and colour blind users can distinguish the content well. In addition, this makes an app easier for everyone to use, for example outside in the sun.

- Solution for success criterion 1.4.11 🗹
- Definition of success criterion 1.4.11 🗹
- Explanation of success criterion 1.4.11

## 📷 Succes Criterion 2.1.1 - Keyboard

Ensure that all functionality in the app can be used with assistive technologies. People who are blind use the screen reader. People with a motor disability use switch control, voice control and/or the keyboard. These assistive technologies are built into the operating system.

- Solution for success criterion 2.1.1  $\ensuremath{\mathbb{Z}}$
- Definition of success criterion 2.1.1 ₫
- Explanation of success criterion 2.1.1 ⊿

#### Succes Criterion 2.4.3 - Focus Order

Ensure assistive technologies use a logical focus order when navigating. The order of navigating a screen is usually from left to right, from top to bottom. Make sure assistive technologies use an equivalent focus order. The difference with success criterion 1.3.2 is that this only concerns the focus order.

- Solution for success criterion 2.4.3 ⊿
- Definition of success criterion 2.4.3 ⊿
- Explanation of success criterion 2.4.3 ☑

#### **Succes Criterion 2.4.7 - Focus Visible**

Ensure that elements focused by assistive technologies are clearly indicated. Focus is often shown by placing a box around the element. Make sure that the placement is correct and that the colour is clearly visible. For apps it is not possible to adjust the colour of the frame. However, it is possible to give elements a different background colour when they have focus.

- Solution for success criterion 2.4.7 🗹
- Definition of success criterion 2.4.7 
   Z
- Explanation of success criterion 2.4.7 ⊿

# 🖑 Succes Criterion 2.5.1 - Pointer Gestures

Ensure an alternative is provided for all gesture-triggered actions. People with a motor disability cannot perform all gestures. For example, not everyone is able to move two fingers apart to zoom. Add an alternative, such as a button, to allow users to zoom in without gestures.

- Solution for success criterion 2.5.1  $\ensuremath{\mathbb{Z}}$
- Definition of success criterion 2.5.1 ☑
- Explanation of success criterion 2.5.1 🗹

#### Succes Criterion 2.5.3 - Label in Name

Ensure the technical name of elements contain the visual name. A button with the text 'Log in' must be able to be activated by voice control via this name. This is not possible if the technical name is different. For visually impaired people using a screen reader, it is also confusing when they hear a different name compared to what they see on the screen.

- Solution for success criterion 2.5.3 ☑
- Definition of success criterion 2.5.3 ₽
- Explanation of success criterion 2.5.3 ₽

#### Succes Criterion 3.2.2 - On Input

Ensure it is predictable what will happen when entering data. In case the focus moves automatically on correct input, this should be indicated in advance. Indicate if a new screen will be opened when submitting a form. Unexpected actions can confuse users with visual or cognitive impairments.

- Solution for success criterion 3.2.2 ☑
- Definition of success criterion 3.2.2 
   Z
- Explanation of success criterion 3.2.2

#### Succes Criterion 3.3.2 - Labels or Instructions

Ensure clear instructions are provided in places users have to input data. Add a label to the input fields, for example 'First name'. Mark whether fields are required or optional. Indicate if data must be entered in a specified order. All users benefit from clear instructions. Clear instructions are indispensable for users with cognitive impairments.

- Solution for success criterion 3.3.2 ⊿
- Definition of success criterion 3.3.2 🗹
- Explanation of success criterion 3.3.2 ☑

# Succes Criterion 4.1.2 - Name, Role, Value

#ERROR!

- Solution for success criterion 4.1.2 
   Z
- Definition of success criterion 4.1.2 
   Z
- Explanation of success criterion 4.1.2 ⊿

#### Succes Criterion 4.1.3 - Status Messages

Ensure that status messages are also passed to assistive technologies. A blind user cannot see new information appearing anywhere on the screen. By providing a status message, the screen reader can announce that new information is available.

- Solution for success criterion 4.1.3 <sup>I</sup>
- Definition of success criterion 4.1.3 ₽
- Explanation of success criterion 4.1.3 ₽

# **Appendix A: Findings per screen**

In total we made 31 findings on 8 screens.

Nr	Screen	Amount of findings
1	Beginscherm	0
2	Onboarding: Postcode	7
3	Afvalkalender	4
4	Containerlocaties	15
5	Afvalwijzer	3
6	Informatie	0
7	Instellingen	2
8	Berichten	0
	Total	31

The following pages list all the findings per screen.

# 1. Beginscherm

We have not made any (new) findings this screen. This screen may contain recurring findings that have already been reported on other screens.

# 2. Onboarding: Postcode

We detected 7 findings on this screen.

Nr	Success criterion	Problem	Screenshot
1	전 <u>1.1.1 </u> Non-text Content	The decorative image is read aloud by the screen reader. Make sure all decorative im- ages are hidden. The decorative background im- age gets focus but does not have a label. The images still get focus. But are obscured by the input fields. Also contrast of "Eier- doos" is insufficient, text is not scaling and "Een schone wereld" is not visible at all and the focus boarder of the screen reader is not visible.	IPod < 09:16
2	述 <u>1.1.1 </u> Non-text Content	The meaningful image has no label. Make sure the screen reader can read the meaning of this image. The checkbox provides infor- mation that this adres will be selected. "Geselecteerd: Wege- doornpad 16"	Geen simkaart        10:43         Postcode         2691       EW         Huisnummer         16         Controleren         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder         Wegedoornpad 16         2691EW s-         Gravenzande

Nr	Success criterion	Problem	Screenshot
10	וmages of Text	The text from the image is not offered as plain text on the screen and therefore cannot be adjusted by the user. Make sure that the user can adjust text to their needs. The background image con- tains text which screen reader users will miss. It's important to ensure this text is accessible to all users. Also in landscape modus part of the text is missing. Tip. Do not use text in an im- age. It results in multiple is- sues.	<page-header><section-header></section-header></page-header>
19		Because visible text on the but- ton does not appear in the ac- cessible name of the button, this button cannot be activated with voice. Make sure the ac- cessible name contains the vi- sual name. Visible text label should be the same as announced by the screenreader. Please add "(1234)" as is done with the input field "Huisnum- mer (100)".	Geen simkaart     jouw kaart   jouw kaart   wordt     Postcode     (1234)   (AB)     Huisnummer     (100)     Controleren     ©ostcode nummer, Tekstveld, Tik dubbel ot

Nr	Success criterion	Problem	Screenshot
20	<u>3.2.2 ⊡</u> On Input	When the user enters data in the input field, the data is sent automatically. Make sure the user is informed about this be- havior in advance. After entering the first 4 num- bers the focus automatically moves to the Postcode letter field.	Geen simkaart     Jouw kaart   jouw kaart   voordt     Postcode   (1234)   (AB)     Huisnummer   (100)     Controleren     (100)     Controleren
21	™ <u>3.3.2</u> Labels or Instruc- tions	A specific instruction is includ- ed in the placeholder text. This information disappears when the user starts entering data. Make sure the label/instruction remains visible at all times. It is about the text "(1234)" and "(AB). Consider merging the (1234) and (AB) fields to make the postal code a single field. When doing so, the "Postcode" label is sufficient. The name is added, but visually the label is not available after typing.	Postcode       09:29       Image: Control of the second of the s

Nr	Success criterion	Problem	Screenshot
30	(말 <u>4.1.3 년</u> Status Messages	The button triggers new con- tent. This content receives no focus and is not read aloud. Make sure this information is accessible. After submitting the adress the focus is removed to the begin- ning of the screen. Also the new adress is not announced by the screen reader.	Geen simkaart        10:43         Postcode         2691       EW         Huisnummer         16         Controleren         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder         Wegedoornpad 16         2691EW s-         Gravenzande         Ga Verder

#### 3. Afvalkalender

We detected 4 findings on this screen.

Nr	Success criterion	Problem	Screenshot
7	₄A <u>1.4.4 t</u> Resize text	<ul> <li>(Parts of) text on this screen are no longer visible when the text is magnified to 200%.</li> <li>Make sure that all text remains available to users who use the app with an enlarged text.</li> <li>It is about "2024".</li> <li>The screen reader is not able to move focus to the dates in the table. Make sure all infor- mation in the table has an al- ternative. Currently we were not able to test this as there were no pick-up dates.</li> </ul>	Geen simkaart        10:47       (%)         ■       Kalender       Kalender         Aankomende ophaaldagen       ,         *       September       ,         ma       di       wo       do       vr       za         26       27       28       29       30       31       1         2       3       4       5       6       7       8         9       10       11       12       13       14       15         16       17       18       19       20       21       22         23       24       25       26       27       28       29         september       2024       24       25       26       27       28       29
13	i	The screen/parts of the screen cannot be operated with an ex- ternal keyboard. Make sure that all functionality is available using an external keyboard. The menu cannot be reached with an external keyboard. The external keyboard is not working in the app at all. This issue occurs on all the screens.	Prod Connected tosACCP   Uw locatie   Wegedoornpad 16   2691EW s-Gravenzande   ES   Kalender   O   Containerlocaties   A   Welk afval waar?   O   Grofvuilmelding   Grofvuilmelding   Berichten   Istellingen   Deze app is ontwikkeld en geproduceerd door Ximmio BV.

Nr	Success criterion	Problem	Screenshot
24	♥ <u>4.1.2 r</u> Name, Role, Value	The accessible name of this button does not describe whether it is selected or not. Make sure that this informa- tion is read by the assistive technology. All the buttons in the menu list have the value 'Selected'. Make sure that only the selected tab has the value 'selected'.	CWegedbacropped 16       12:21         Z691EW s-Gravenzande         Containerlocaties         Containerlocaties         Welk afval waar?         Melding maken         Grofvuilmelding         Pbd-zakken bestellen         Berichten         Instellingen         Instellingen         Informatie & Privacy         Pzez app is ontwikkeld en geproduceerd door Ximmio BV.         Alle rechten voorbehouden.         Menu sluiten GeselecteerdContainerlocaties, Knop
25	♀ <u>4.1.2 r</u> Name, Role, Value	This interactive element does not have a proper role. This el- ement looks and behaves like a button. Make sure the screen reader announces the correct role of this element. In the re-audit, this was solved for almost all the buttons in the menu, except for the 'Menu sluiten' button.	c.Wegedbarqp:d16       12:18         2691EW s-Gravenzande       12:18         Image: Containerlocaties       Image: Containerlocaties         Image: Containerlocaties       Image: Containerlocaties      <

## 4. Containerlocaties

We detected 15 findings on this screen.

Nr	Success criterion	Problem	Screenshot
3	전 <u>1.1.1 </u> Non-text Content	The menu button has the label: "Navigationmenu openenNavi- gationmenu openen". Make sure it only announces the la- bel once.	Geen simkaart Containerlocaties
4	i≣ <u>1.3.1 ⊠</u> Info and Relation- ships	On this screen, there are head- ings that are not marked-up as headings. Make sure that assis- tive technology recognizes headings as headings. Also the focus indicator is around the whole screen. Try to put it only around the head- ing "Afvalsoorten".	Geen sinkaart 1:04   Containerlocaties     Afvalsoorten     Image: Containerlocaties     Afvalsoorten

Nr	Success criterion	Problem	Screenshot
5	Info and Relationships	The label is not programmati- cally associated with the relat- ed input field. Make sure that by selecting an input field, the screen reader reads the label. It concerns the label 'Zoeken op adres of afvalgroep'. This la- bel should be programmatical- ly associated with the input field to enable navigation with Voice Control. Ensure that the input field has a name that is both visible and programmatically associated with it, a correct role, and that the placeholder text is read aloud by the screenreader. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Not able to check in V4.	Ceen simkaart CONTAINERLOCATIES     CONTAINERLOCATIES     Coeken op adres of afvalgroup     Coeken op adres of afvalgroup     Vul hier een adres in     Containers in mijn buurt     Glas   Beatrixstraat     Papier   Beatrixstraat     Glas   Bereklauw   Vul hier een adres in

Nr	Success criterion	Problem	Screenshot
8	₄A <u>1.4.4 ⊠</u> Resize text	The text that is pinned to the screen covers other text. Make sure the texts do not cover each other. "PMD" is below the button "An- nuleren".	Containerlocaties     Containerlocaties     Afvalsoorten
9	₄A <u>1.4.4 r</u> Resize text	The text that is pinned to the screen covers other text. Make sure the texts do not cover each other. This concerns the error mes- sage. Not able to check in V4.	Geen simkaart        20:04       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Imag

Nr	Success criterion	Problem	Screenshot
11	-∰- <u>1.4.11</u> <u>P</u> Non-text Contrast	The contrast of interface ele- ments on this screen is less than 3.0:1. Provide a minimum contrast of 3.0:1. It is about the contrast of the toggle in unselected state.	Ceen simkaart 11:02 11:02   Containerlocaties   Afvalsoorten   Restafval     Restafval <
12	· <u></u> . <u>1.4.11</u> Non-text Contrast	The contrast of interface ele- ments on this screen is less than 3.0:1. Provide a minimum contrast of 3.0:1. It concerns search icon. Con- trast is 2.67:1. Suggestion: The label of the in- put field has a spelling mistake - "AfvalgroUp" (U instead of E) Not able to check in V4.	Ceen simkaart •       19:41       1         E       CONTAINERLOCATIES         I       •         Zoeken op adres of afvalgroup         •       Vul hier een adres in         Ontainers in mijn buurt         I       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Containers in mijn buurt         Image: Containers in mijn buurt       Image: Cont

Nr	Success criterion	Problem	Screenshot
14	<u>2.1.1 r</u> Keyboard	The screen/parts of the screen cannot be operated with an ex- ternal keyboard. Make sure that all functionality is available using an external keyboard. Search field is not focusable and not editable in landscape mode. Not able to check in V4.	<ul> <li>CONTAINERLOCATIES</li> <li>I Containers of afvalgoup</li> <li>Vul hier een adres in</li> <li>Containers in mijn buurt</li> <li>Panier</li> <li>Zoeken op adres of afvalgroup, <u>Koptekst</u></li> </ul>
15	2.4.3 ⊡         Focus Order	The focus order of the ele- ments on the screen is not the same as the visual order of the elements. Ensure that the screen is read by assistive tech- nology in the same order as the visual order of elements. The focus goes to "Er zijn geen containers in de buurt" and on- ly then to the heading " Con- tainers in mijn buurt". The fo- cus of the first element is the complete screen and potential- ly the reason for announcing it first.	Geen simkaart     Image: Container locaties     Image: Container locaties

Nr	Success criterion	Problem	Screenshot
16	@ <u>2.4.7 ଜ</u> Focus Visible	The focus lands on invisible el- ements. Make sure that the fo- cus only lands on visible ele- ments. The visible focus frame for the 'Zoekveld leegmaken' button should be around the respec- tive button. Currently, it is posi- tioned in the wrong place. Not able to check in V4.	Containers in mijn buurt PMD Burgemeester Hoogenboomstra at Containers in mijn buurt END Burgemeester B

Nr	Success criterion	Problem	Screenshot
23	End 3.3.2 r Labels or Instructions	In this input field, a placehold- er text serves as a label. The placeholder text disappears when a user starts to type and therefore cannot act as a label. Make sure that the label al- ways remains visible. It concerns the input field 'Vul hier'. Ensure that the input field has a name that is both visible and programmatically associated with it, a correct role, and that the placeholder text is read aloud by the screenreader. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Censimilant • 1941     CONTAINERLOCATIES     Image: Containers of afvalgroup     Image: Containers in mijn buurt     Image: Containers in mijn buurt

Nr	Success criterion	Problem	Screenshot
26		The toggle button has no name. Group the toggle button	Geen simkaart       The second se
		and its label so that they can be read as one element by the	Afvalsoorten
		assistive technology.	📄 Restafval 🔷
			€ GFT
			🛐 Papier 🛛 🗨
			🚹 Glas 🛛 🗨
			Textiel ANNULEREN
			Schakelknop, uit
27		This interactive element does not have a proper role. This el- ement looks and behaves like a button. Make sure the screen	Geen simkaart  T1:12 ■ Containerlocaties
			Afvalsoorten
		reader announces the correct role of this element.	闦 Restafval 📃 🗨
	It is about the button "An- nuleren".		GFT 🕩
			🔊 Papier 🛛 🗢
			🗓 Glas 🛛 🗢
			ANNULEREN

Nr	Success criterion	Problem	Screenshot
28	Provide       4.1.2 II         Name, Role, Value	This interactive element does not have a proper role. This el- ement looks and behaves like an input field. Make sure the screen reader announces the correct role of this element. It concerns the input field 'Vul hier'. Ensure that the input field has a name that is both visible and programmatically associated with it, a correct role, and that the placeholder text is read aloud by the screen reader. For example, "Zoeken op adres of afvalgroep, bewerkingsvak, Vul hier een adres in." Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Ceen sinkaart 19:41     CONTAINERLOCATIES     Image: Containers of afvalgroup     Vul hier een adres of afvalgroup     Vul hier een adres in     Image: Containers in mijn buurt     Image: Containers in mijn buurt </td

Nr	Success criterion	Problem	Screenshot
31	∰ <u>4.1.3</u> Status Messages	The button triggers new con- tent. This content receives no focus and is not read aloud. Make sure this information is accessible. When an incorrect street name is entered, an error message appears. However, the focus does not automatically shift to this message, and it is not read aloud by the screen reader. Similar situation occurs with the search field on the screen "welk afval waar?". Not able to check in V4.	Geen simkaart       20:04       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Container locaties         Image: Container locaties       Image: Container locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Control locaties       Image: Control locaties       Image: Control locaties       Image: Control locaties         Image: Co

# 5. Afvalwijzer

We detected 3 findings on this screen.

Nr	Success criterion	Problem	Screenshot
6	≣ <u>1.3.1 ⊠</u> Info and Relation- ships	On this screen, there are head- ings that are not marked-up as headings. Make sure that assis- tive technology recognizes headings as headings. It is about the bold headings: "Wat wel/wat niet?" and "Wel" and "Niet" etc.	IPOd TOTAL       10:16       Image: Contract of the second
18	骨 <u>2.5.1 </u> Pointer Gestures	There is no alternative for the pointer gestures. Make sure that all functionality can also be used without using (multi- ple) fingers, for example by of- fering extra buttons. It is possible to navigate through the text only by swip- ing sequentially. Focusing on a specific paragraph via touch is not possible. This means that users who rely on a screen reader and wish to listen to a middle section of the text would need to swipe through the entire text in sequence.	Geen simkaart ♥       11:20       ↑ ♥         ■       WELK AFVAL WAAR?         Onze gemeente aan huis       opgehaald. Dit gebeurt         op vaste dagen of op       afspraak. Huisvuil kunt u         ook ook zelf       wegbrengen naar een         milieustraat of naar een       milieu-eiland.         Restafval       Nat is het?         Restafval is het afval dat overblijft na het scheiden       van recyclebaar afval zoals groente-, fruit- en         uinafval en etensresten (gft+e), papier, glas, textiel       en plastic verpakkingen, metalen

Nr	Success criterion	Problem	Screenshot
29	♥ <u>4.1.2 r</u> Name, Role, Value	The value/state of a button should be obvious without changing this state. Make sure the screen reader announces the value/state together with the button name. The value of the non-selected button is being announced as 'gehandicapt'.	Ceen simkaart       11:53         Image: Constraint of the constration of the constraint of the constraint o

## 6. Informatie

We have not made any (new) findings this screen. This screen may contain recurring findings that have already been reported on other screens.

# 7. Instellingen

We detected 2 findings on this screen.

Nr	Success criterion	Problem	Screenshot
17	@ <u>2.4.7</u> Focus Visible	The focus lands on invisible el- ements. Make sure that the fo- cus only lands on visible ele- ments. When navigating with swiping gestures, after 'Instellingen', the whole screen receives fo- cus, but the screen reader does not announce anything. Ensure that all visible elements receive focus and are an- nounced by the screen reader. Elements should receive focus in the correct order when navi- gating sequentially, and all ele- ments should be focusable when navigating with point gestures. Currently, it is only possible to navigate sequen- tially by swiping.	Geen simkaart ♥       12:18       1 (16)         INSTELLINGEN         Uw adresgegevens         Postcode         2691       EW         Huisnummer         16         Controleren         Wegedoornpad 16         2691EW s-         Gravenzande         INSTELLINGEN, Koptek:

Nr	Success criterion	Problem	Screenshot
22	≝ <u>3.3.2</u> Labels or Instruc- tions	In this input field, a placehold- er text serves as a label. The placeholder text disappears when a user starts to type and therefore cannot act as a label. Make sure that the label al- ways remains visible. The input fields do not have a visible label after editing.	Geen simkaart        11:19       ✓          ■       Instellingen         UUr       Voor meldingen         d       r         5

#### 8. Berichten

We have not made any (new) findings this screen. This screen may contain recurring findings that have already been reported on other screens.