

From
the People of Japan

DIA Support Project



Web Accessibility of Government Authorities' Websites

Report on monitoring results

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Introduction

The report reflects the results of monitoring of accessibility of 100 government online resources, which has been carried out for the third year already to assess accessibility of government authorities' websites for identification of shortcomings and assisting in elimination thereof.

The monitoring was conducted using a special methodology developed in 2021 by the United Nations Development Programme (UNDP) in Ukraine. The methodology is based on the principles of the Web Content Accessibility Guidelines (WCAG) – the most widely used global recommendations for assessment of web accessibility. The methodology contains comprehensive, clear, and user-friendly instructions that public authorities can effectively use to assess basic accessibility of their websites, contents thereof, or digital services provided on these websites. The full text of the methodology is set out in Appendix 2 to this report.

In partnership with the Ministry of Digital Transformation of Ukraine, the UNDP Ukraine is actively promoting the development of digital accessibility in the state. In particular, starting from 2021, through joint efforts the following actions have been made:

- adoption of national standard for web accessibility – DSTU EN 301 549:2022, which fully duplicates the European standard bearing the same name, based on the principles and criteria of WCAG 2.1. One of the main goals of adopting the standard is to bring our legislation closer to international requirements;
- development of an official [Ukrainian translation](#) of WCAG 2.1 to simplify the use of these guidelines for domestic developers and government officials responsible for creation and modernization of public online resources;
- creation of educational series [“Web Accessibility”](#) for civil servants on the platform “Diia. Osvita” and publication of [“Brief Digital Accessibility Manual”](#) based on its materials;
- conducting of sociological survey and a number of analytical studies aimed at identifying the needs of people with disabilities in terms of digital services, key areas of state policy in this area, institutional mechanisms for regulating digital accessibility at the government level and tools for monitoring and control of compliance with the established web accessibility requirements. The materials of these studies are available on the portal [Diia.Barrier-Free Environment](#);
- development of [CMU Resolution No. 757](#) “Some issues of accessibility of information and communication systems and documents in electronic form”, according to which all websites and mobile applications of executive authorities, as well as electronic documents posted on these resources must comply with the aforementioned DSTU EN 301 549:2022;
- conducting of several stages of trainings for civil servants of different levels in order to raise their awareness of creating an accessible interface and content (web content) of the website. As of December 2023, over 800 government officials have been trained.

The monitoring results over the past three years, while confirming a significant progress in the area of compliance with the accessibility requirements by managers of government web resources, demonstrate the need for a more centralized and systematic approach to administrative and institutional measures to regulate the web accessibility requirements at the state level, and also intensify the information and educational activities.

In addition, today's digital accessibility requirements in Ukraine include web resources, mobile applications, and electronic documents of only public executive authorities and institutions under their control. This means that for local self-government bodies and private sector, they are purely advisory in nature. In addition, the requirements do not apply separately to electronic services, as is currently regulated in the EU countries by the European Accessibility Act (Directive 2019/882, which will enter into force on June 28, 2025).

Therefore, it is advisable for the Ukrainian government to continue harmonization of its domestic legislation with the European standards and requirements, which involves defining the functions of institutional support, expanding the scope of digital accessibility requirements, control over the implementation of requirements and regular monitoring activities by supplementing the regulatory framework for digital inclusion. Considering [the best practices of the EU countries](#), the most appropriate step would be to develop a separate draft law on digital inclusion.

It is important to note that in October 2023, the World Wide Web Consortium (W3C) approved an updated version of the Web Content Accessibility Guidelines – WCAG 2.2. This version contains minor additions to previous version 2.1, including 9 new success criteria related to accessible help, reflection of keyboard focus, active area scope and accessible authorization requirements. The international accessibility standards, as well as the Ukrainian DSTU EN 301 549:2022 will refer to WCAG 2.1 for some time, and the transition to WCAG 2.2 will be gradual and will not require significant changes in accessibility requirements. Therefore, the methodology used for monitoring remains relevant.

Monitoring methodology

The methodology for monitoring the government websites' accessibility involves checking the indicator of basic accessibility using automatic website scanning with help of special tools (currently, the Accessibility Insights for Web plugin is used) and conducting simple manual tests. The monitoring procedure does not require any special knowledge.

The basic accessibility indicator includes the following criteria:

1. Sufficient text contrast.
2. Availability of alternative text for all images.
3. Availability of accessible text for all hyperlinks.
4. Availability of text labels for all buttons.
5. Availability of text labels for form fields.
6. Software determination of main language of the page.
7. Lack of errors in the page code.
8. Quick access to main content of the page.
9. Keyboard focus marking.
10. Support for keyboard control.

The degree of achievement of the indicator and its criteria is assessed on the basis of estimation data obtained as a result of visual inspection of website pages and analysis of their code using special plugins designed to check accessibility.

To verify criteria 1-7, this monitoring used automatic analysis of a web page using the Accessibility Insights¹ extension for Google Chrome browser. Criteria 8-10 are checked manually.

If, according to the estimation data, a criterion of the indicator:

- 1) **is achieved**, the measurement coefficient of the indicator criterion is set to "1". In this case, the score is equal to 1 point;
- 2) **is not achieved** or no estimation data is available, the measurement coefficient of the indicator is set to "0". In this case, the score is equal to 0 points.

The basic accessibility indicator is equal to the sum of points for all its criteria. The minimum value of the indicator is 0 points; the maximum value is 10 points.

The basic accessibility indicator is used to calculate the level of basic accessibility of a website:

0-3 points	Low level
4-6 points	Average level
7-8 points	Sufficient level
9-10 points	High level

¹ Accessibility Insights for Web is an extension for Chrome and new Microsoft Edge that helps to find and fix problems with special features in the web programs and on the websites. For more information and to download, follow the link: <https://accessibilityinsights.io/docs/en/web/overview/>.

Summary of the monitoring

The monitoring was conducted in the period from October 1 to November 30, 2023 to analyze accessibility of 100 websites of executive authorities at the central and local levels, while calculating the basic accessibility indicator of these websites and comparing the results of this monitoring with the results of similar studies for 2022 and 2021.

It should be noted that there were minor changes in the 2023 sample: one website was replaced due to liquidation of the service, and four websites were replaced with other web resources that contain services important to citizens.

Based on the monitoring results, 3 out of 100 websites gained maximum 10 points as a score of basic accessibility. A high level of basic accessibility is achieved by 4% of websites (which is 1% more than in 2022), sufficient level – by 18% of websites (1% more than in 2022), average level – by 51% of websites (2% less than in 2022), and low level – by 27% of websites. A comparison with the results of 2022 is shown in Table 1. Detailed monitoring results are set out in Appendix 1 to this report.

Table 1. Distribution of websites by level of basic accessibility

Level of accessibility	Percentage in 2022	Percentage in 2023
High	3%	4%
Sufficient	17%	18%
Average	53%	51%
Low	27%	27%

Four websites have high level of accessibility:

- portal “Diia.Barrier-Free Environment” (<https://bf.diia.gov.ua>) — 10 points;
- website of Vinnytsia Regional Military Administration (<https://www.vin.gov.ua/>) — 10 points;
- website of Lviv Regional Military Administration (<https://loda.gov.ua/>) — 10 points;
- website of Kharkiv Regional Military Administration (<https://kharkivoda.gov.ua>) — 9 points.

It is worth noting that one of the leaders in 2022 is the Carrier’s Electronic Cabinet, which operated at the address: e-services.dsbt.gov.ua, and is currently under liquidation, so it was excluded from monitoring. However, by the end of 2023, several regional military administrations increased the level of basic accessibility of their websites to high, so the total number of websites with high level of accessibility still increased. Most often, accessibility problems are related to failure to achieve five out of ten criteria of basic accessibility indicator, namely: providing a mechanism to quickly navigate to main content of the page; sufficient text contrast; marking the keyboard focus; availability of accessible text for all hyperlinks; and lack of errors in the web page code.

Based on the results of the analysis of the list of unachieved criteria, the following most common errors can be identified:

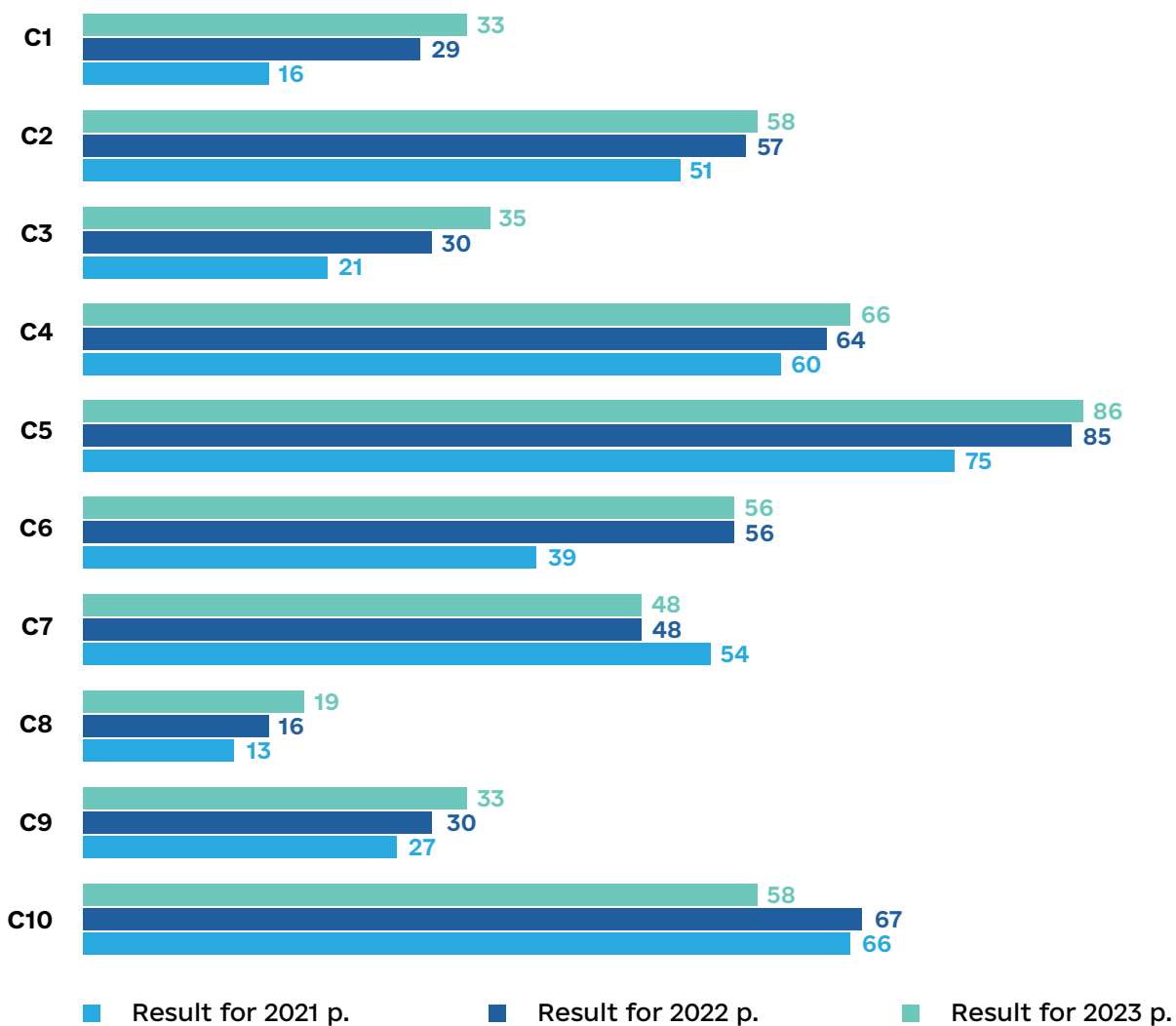
- **lack of a mechanism to quickly navigate to main content**, which makes it difficult for users who are completely blind and have impaired motor skills to navigate the website (link to main content is missing or broken);
- **low text contrast**, which prevents people with partial vision loss from reading the text (contrast is lower than 4.5 to 1, which is the minimum requirement of WCAG 2.1);
- **lack of a visible focus indicator when navigating using the keyboard**, which makes such navigation inaccessible to people with partial vision loss or motor impairment (the keyboard focus indicator is not displayed at all or displayed not on all interactive elements);
- **lack of text for hyperlinks**, which makes them incomprehensible to blind users who use screen readers (usually this applies to links that contain images instead of text – an icon, a pictogram or a banner);
- **errors in the page code**, in particular in the ARIA markup, which negatively affects the operation of assistive technologies (usually occurs on complex criteria, such as carousels, tab bars, modal windows, etc.).

Thee least implemented criteria are shown in Table 2. Detailed recommendations on how to achieve each criterion are described in Section “Technical recommendations for elimination the causes of the failure to achieve the criteria”.

Table 2. The least implemented basic accessibility criteria

Number and name of the criterion	Percentage of all verified web resources
C8: Quick navigation to main content of the page	19%
C1: Sufficient text contrast	33%
C9: Marking the keyboard focus	33%

When it comes to comparing the achievements of some criteria in 2021-2023, **the vast majority of analyzed websites show a progress**. This is especially true for criteria C1 “Sufficient text contrast” (doubled from 16% to 33%), C3 “Availability of accessible text for all hyperlinks” (increased from 21% to 35%) and C6 “Software determination of main language of the page” (increased from 39% to 56%). At the same time, the criteria C7 “Lack of errors in the page code” and C10 “Keyboard control support” show some regression, although these characteristics are not in the list of the least implemented ones. The leaders in terms of implementation at the end of 2023 are criteria C5 “Availability of text labels for form fields” and C4 “Availability of text labels for all buttons” (86% and 66%, respectively). The above dynamics is shown in Graph 1.



Graph 1. Comparison of monitoring results for two years

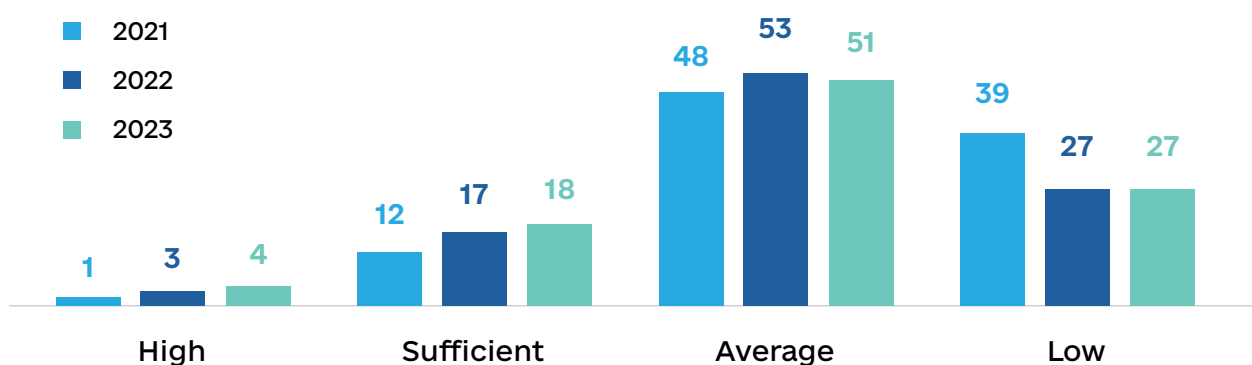
Comparison of the monitoring results for 95 websites that were consistently assessed in 2022 and 2023 showed the following trends over the year:

- 23 websites improved their basic accessibility indicators, 52 showed the same result, while 20 websites showed a particular regression. Therefore, we can record slight positive dynamics, which, however, once again shows that the level of web accessibility, unfortunately, may also be deteriorating.
- Among websites that increased their basic accessibility indicator, 1 website improved the result by 6 points, 1 website – by 4 points, 4 websites – by 3 points, 3 websites – by 2 points, and 14 websites – by 1 point.
- Among sites whose basic accessibility indicator decreased, 16 sites decreased the result by 1 point, 3 sites – by 2 points, and 1 site – by 3 points.
- Among websites whose basic accessibility indicator increased in 2023 as compared to previous year, leading websites are those of Vinnytsia Regional Military Administration (<http://www.vin.gov.ua>), the Ministry of Economy of Ukraine (<https://www.me.gov.ua>), Lviv Regional Military Administration (<https://loda.gov.ua/>), Poltava Regional Military Administration (<https://poda.gov.ua>), the Electronic Cabinet of a person with disability (<https://ek-cbi.msp.gov.ua>) and Volyn Regional Military Administration (<http://voladm.gov.ua>).

Table 3. Websites with the greatest progress in terms of accessibility in 2023

Website name	Website address	Score in 2023	Progress in 2023
Vinnitsia Regional Military Administration	http://www.vin.gov.ua	10	+6
Ministry of Economy of Ukraine	https://www.me.gov.ua	7	+4
Lviv Regional Military Administration	https://loda.gov.ua	10	+3
Poltava Regional Military Administration	https://poda.gov.ua	8	+3
Electronic cabinet of a person with disability	https://ek-cbi.msp.gov.ua	8	+3
Volyn Regional State Administration	http://voladm.gov.ua	7	+3

Thus, **this round of monitoring has shown that there has been positive dynamics for the second year in a row.** Currently, 3 out of 100 websites are fully accessible, and a total of 4 websites have a high level of accessibility. In addition, the number of websites with an improved level of accessibility continues to grow: for example, in 2021, only 12% of websites demonstrated a sufficient level, while in 2023 this figure reached 18%. And the number of websites with a low level of accessibility, respectively, decreased from 39% to 27% in 2021-2023. The dynamics for the three years of observations are shown in Graph 2.

**Graph 2.** Dynamics of the level of accessibility of government websites in 2021-2023

The analysis of the results clearly shows a positive correlation between training of representatives of government authorities on accessibility issues and improved accessibility of their online resources. Among institutions whose websites have high basic accessibility indicator or significantly increased accessibility in 2023, we see mainly those whose representatives sought consultations with representatives of the Ministry of Digital Transformation of Ukraine and the UNDP Ukraine or attended specialized trainings on digital accessibility.

Therefore, further similar initiatives to raise awareness of digital accessibility, such as conducting trainings and providing consultations, are considered useful and practical. Therefore, it is recommended that further training events be held for civil servants and technical professionals responsible for modernization of government websites.

Conclusions and recommendations

The monitoring results revealed that 97 out of 100 websites, unfortunately, still have some accessibility barriers. This means that the electronic services provided through these online resources may be partially or completely inaccessible, in particular to people with disabilities, visual impairments, or older people. Among general recommendations for increasing the level of accessibility of these websites, the following worth attention:

- Website owners with a low or average level of basic accessibility are recommended to initiate the modernization of services taking into account the criteria of DSTU EN 301 549:2022.
- Website owners that have a sufficient or high level of basic accessibility but have not achieved all criteria are recommended to correct during the next scheduled modernization the existing accessibility errors and take into account all criteria of DSTU EN 301 549.
- All websites owners are recommended to periodically audit the accessibility of electronic resources and remove the identified barriers in a timely manner.

Technical recommendations for elimination of reasons for non-achievement of the criteria

Based on the results of the analysis of errors that make it impossible to ensure the achievement of criteria of basic accessibility, a number of technical recommendations have been formulated that should be taken into account when modernizing the websites.

Note: achievement of all 10 criteria of basic accessibility does not mean compliance with DSTU EN 301 549:2022. To fully comply with DSTU, a website must meet all its criteria, applicable to web content and electronic documents.

Recommendations for elimination of reasons for the failure to achieve **critereon 1** “Sufficient text contrast”

Typical errors:

- the text of additional information has contrast of less than 4.5:1;
- contrast between the fill button and the text on it is less than 4.5:1.

How to fix them:

- Select colors of the text and the background so that:
 - a) plain text has a contrast ratio of at least 4.5:1;
 - b) large text (18 points or 14 points semi-bold) has a contrast ratio of at least 3:1.

Note: text that is part of an inactive interface criterion, part of a logo or a brand name does not require contrast.

To measure the contrast of two colors, you can use a special tool for checking the contrast, for example: <https://webaim.org/resources/contrastchecker/>

Recommendations for elimination of reasons for the failure to achieve **critterion 2** “Availability of alternative text for all images”

Typical errors:

- news covers, illustrations in articles, logos do not have an alternative text;
- decorative images are not hidden from the screen reader using an empty **alt** (**alt=""**);
- images contain stubs instead of proper alternative text (for example, **“img1”**).

How to fix them:

- Provide all images that are important for understanding the content with proper alternative text using **alt html**-attribute or relevant field in website’s administrative panel:
 - a) an example of a proper alternative text for the logo: **alt=“Logo Diia”**.
 - b) an example of alternative text for illustration: **alt=“Ornament 'tree of life' with yellow and blue flowers and birds on a black background”**.
- All decorative (non-informative) images must be hidden from assistive technologies by using an empty alternative text (example: **alt=""**).

Recommendations for elimination of reasons for the failure to achieve **critterion 3** “Availability of accessible text for all hyperlinks”

Typical errors:

- links to social media contain only social media icons, and no textual label is provided;
- news or article covers are clickable, but do not have alternative text, so that the link that contains image has no text for screen reader.

How to fix them:

- Make sure that all hyperlinks have visible text or an image attached thereto (for example, **an icon**).
- If an image is used instead of text, make sure that the image has appropriate alternative text.
- Make sure that the text of the link makes it clear what the link is intended for.
- If it is impossible to add visible text to a link because an icon or an image of the text is used, add the **aria-label** attribute (for example, **aria-label=“Learn more about Diia project”**).

Note: the aria-label attribute allows to add a text label that is not visually displayed, but is available only to screen readers used by blind users.

An example of proper text for a link to a page in a social media, added using the **aria-label** attribute: **aria-label=“Diia in Facebook (opens in a new window)”**.

Recommendations for elimination of reasons for the failure to achieve **critterion 4** “Availability of text labels for all buttons”

Typical errors:

- search button, buttons for submitting forms, buttons for displaying additional content are marked with a graphic icon without a text label for screen reader.

How to fix them:

- Make sure that all buttons have a text label.
- If an image (for example, an icon) is used instead of a visible text label, make sure that the image has appropriate alternative text.
- Make sure that the text label for a button makes it clear what the button is intended for.
- If it is not possible to add a visible text label for a button or an alternative text for the image associated with this button, add the **aria-label** attribute (for example: **aria-label="Log in"**).

Recommendations for elimination of reasons for the failure to achieve **critterion 5** "Availability of text labels for form fields"

Typical errors:

- the field has no label;
- the **placeholder** attribute is used instead of the label;
- the label is located next to the field, but is not programmatically associated with it.

How to fix them:

- Make sure that all field, checkboxes, radio buttons and picklists have a visible label that is programmatically associated with that field. To associate a label with a field, use the **<label>** tag with the **for** or **aria-labelledby** attribute.
- Make sure that the **placeholder** attribute is not used instead of the label, so that the label does not disappear after entering information in the field. The placeholder attribute should be used solely to demonstrate an example of entering data.
- Make sure that the label text makes it clear what the field is intended for.
- A search form that is marked in a certain way and has a button with a search icon (magnifying glass) next to it does not necessarily should have a visible mark, but in this case, it is recommended to add a label to the search field for screen reader users using the **aria-label** attribute (for example: **aria-label="Search"**).

Recommendations for elimination of reasons for the failure to achieve **critterion 6** "Software determination of main language of the page"

Typical errors:

- page language is not specified;
- language is specified incorrectly (for example, the English language attribute **"en"** is set for the Ukrainian language);
- an incorrect attribute is used (for example, **"ua"** instead of **"uk"** for the Ukrainian language).

How to fix them:

- Set the **lang** attribute with the correct value for the **<html>** element:
 - a) on pages whose content language is Ukrainian, set the attribute **lang="uk"**.
Note: the value **"ua"** is incorrect;
 - b) on pages whose content language is English, set **lang="en"**.

Recommendations for elimination of reasons for the failure to achieve **critterion 7** “Lack of errors in the page code”

Typical errors:

- the same **id** value is used several times;
- the **aria-hidden=“true”** attribute is used for focused elements;
- **ARIA**-attributes are used that are not supported for a particular element role (for example, aria-expanded for **role=“tab”**);
- non-existent ARIA-roles are used.

How to fix them:

- One cannot use multiple elements on a page with the same identifier (**id** attribute) on the page.
- Make sure that if you use the **ARIA**-markup on your website, its application complies with the **WAI-ARIA**² specification.

Recommendations for elimination of reasons for the failure to achieve **critterion 8** “Providing a mechanism to quickly navigate to main content of the page”

Typical errors:

- no link to get to the main content;
- the link to the main content does not work.

How to fix them:

- Add a link in the header of the website to quickly navigate to main content³.

The mechanism works as follows: when a user opens a page, he/she presses the **tab** key -> the focus goes to the link “**Go to main content**” -> the user presses the **enter** key -> the focus goes to the beginning of main content of the page, bypassing the menu and other secondary content.

Recommendations for elimination of reasons for the failure to achieve **critterion 9** “Marking the keyboard focus”

Typical errors:

- The keyboard focus indicator is not displayed at all;
- The keyboard focus indicator is not displayed on all links or other interactive elements.

How to fix them:

- Check whether the **CSS** property is used outline: none; if so, remove it from the style file (**CSS**); after that, the browser will mark the focus automatically. This is enough to meet the requirements.
- It is recommended to add improved focus styles. Improvements may include different background color, different focus color, an outline, or a border.

2 Overview of WAI-ARIA. URL: <https://www.w3.org/WAI/standards-guidelines/aria/>

3 Using links to quickly navigate to main content of the page. URL: <https://webaim.org/techniques/skipnav/>

Recommendations for elimination of reasons for the failure to achieve **critterion 10** “Keyboard control support”

Typical errors:

- a submenu of main menu cannot be expanded using the keyboard (nothing happens after pressing Enter or a link is clicked);
- an element that acts as a button (for example, an icon for switching to a version for visually impaired people) is created without using the **<button>** tag or adding the attribute **tabindex=“0”**, therefore the keyboard focus on the element does not work.

How to fix them:

- Standard interactive elements, such as buttons (**<button>**), links (****), fields (**<input>**), picklists (**<select>**), etc. are always available for keyboard control. This feature is supported in all operating systems. Accessibility problems are usually associated with the use of own (custom) interactive elements. Therefore, it is recommended to use standard interactive elements whenever possible.
- If own interactive element is used, make sure that it has the **tabindex=“0”** attribute.
- If own complex interactive element is used (combined list, radio buttons, carousel), make sure that the role, state, and other properties of the elements are handed over to assistive technologies using ARIA. It is recommended to compare the ARIA markup on the website with a sample on the WAI-ARIA website⁴.

⁴ WAI-ARIA practices. URL: <https://www.w3.org/TR/wai-aria-practices-1.1/>

Appendix 1.

Technical report on monitoring results

I. General information

Name of the indicator	Basic accessibility
Reporting period from	October 1, 2023
Reporting period to	November 30, 2023.
Data source	Browser: Google Chrome 118.0.0.0. Browser extension: Accessibility Insights for Web 2.40.0 (axe-core 4.7.2)

II. Websites, indicator criteria and their scores

Table 1 shows the results of the assessment of criteria of basic accessibility indicator for 100 websites.

Abbreviations used in Table 1:

C1-C10 – score of relevant criterion (from 1 to 10).

BA 2023 – score of basic accessibility for 2023 (current year).

BA 2022 – score of basic accessibility for 2022.

BA 2021 – score of basic accessibility for 2021.

Progress / year – the difference between scores of basic accessibility for 2023 and 2022.

Progress / 2 years – the difference between scores of basic accessibility for 2023 and 2021.

N/A – comparison results are not available, since the website was not assessed in respective year.

Table 1. Detailed monitoring results

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
1.	https://www.kmu.gov.ua/	Website of the Cabinet of Ministers	0	1	0	1	0	0	0	1	0	1	4	4	4	0	0
2.	https://www.president.gov.ua/	Official website of the President of Ukraine	1	1	0	0	1	0	0	0	0	0	3	2	2	1	1
3.	https://www.rada.gov.ua/	Official web portal of the Verkhovna Rada of Ukraine	0	1	0	1	0	0	0	0	0	0	2	3	2	-1	0
4.	https://ssu.gov.ua/	Website of the Security Service of Ukraine	0	1	0	1	0	1	0	0	0	0	3	4	3	-1	0
5.	https://bank.gov.ua/	Website of the National Bank of Ukraine	1	1	0	1	1	1	1	1	0	0	7	6	5	1	2
6.	https://minagro.gov.ua	Ministry of Agrarian Policy and Food	0	1	1	1	0	0	0	0	0	0	3	4	2	-1	1
7.	https://mev.gov.ua	Ministry of Energy of Ukraine	0	1	0	0	1	1	0	1	1	0	5	6	1	-1	4
8.	https://minre.gov.ua/	Ministry of Reintegration of Temporarily Occupied Territories	0	0	0	1	1	1	1	0	1	0	5	6	6	-1	-1
9.	https://mms.gov.ua/	Ministry of Youth and Sports of Ukraine	1	1	0	1	1	0	0	0	0	1	5	5	5	0	0
10.	https://thedigital.gov.ua/	Ministry of Digital Transformation of Ukraine	0	1	0	1	1	1	0	1	0	1	6	6	5	0	1
11.	https://www.me.gov.ua/	Ministry of Economy of Ukraine	1	1	1	1	1	1	0	0	1	0	7	3	3	4	4
12.	http://mvs.gov.ua/	Ministry of Internal Affairs of Ukraine	0	0	0	0	1	1	0	1	1	1	5	6	5	-1	0
13.	https://mepr.gov.ua/	Ministry of Environmental Protection and Natural Resources of Ukraine	0	0	0	1	0	1	0	0	1	0	3	2	3	1	0
14.	https://mfa.gov.ua/	Ministry of Foreign Affairs of Ukraine	0	0	0	0	0	0	0	0	0	1	1	2	2	-1	-1
15.	https://mtu.gov.ua/	Ministry of Community Development, Territories and Infrastructure of Ukraine	0	1	0	1	1	0	1	0	0	1	5	4	3	1	2
16.	https://mkip.gov.ua/	Ministry of Culture and Information Policy of Ukraine	0	0	0	1	1	1	1	0	0	1	5	4	4	1	1
17.	https://www.mil.gov.ua/	Ministry of Defense of Ukraine	0	0	0	1	1	1	1	0	0	1	5	6	3	-1	2

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
18.	https://mon.gov.ua/ua	Ministry of Education and Science of Ukraine	0	1	0	1	0	0	1	0	0	0	3	5	3	-2	0
19.	https://moz.gov.ua/	Ministry of Health of Ukraine	0	0	0	0	1	1	0	0	0	0	2	3	4	-1	-2
20.	https://dsp.gov.ua/	State Labor Service of Ukraine	0	0	0	1	1	1	1	0	1	0	5	H	H	H	H
21.	https://www.msp.gov.ua/	Ministry of Social Policy of Ukraine	1	1	0	1	1	1	0	0	0	1	6	7	4	-1	2
22.	https://mva.gov.ua/ua	Ministry of Veteran Affairs of Ukraine	0	1	0	1	1	0	0	0	0	0	3	3	3	0	0
23.	https://mof.gov.ua/uk	Ministry of Finance of Ukraine	0	1	0	1	1	1	1	0	0	1	6	6	6	0	0
24.	https://minjust.gov.ua/	Ministry of Justice of Ukraine	0	0	1	0	1	1	0	0	0	1	4	4	4	0	0
25.	https://mspu.gov.ua	Ministry of Strategic Industries of Ukraine	0	1	0	0	1	0	0	0	0	1	3	3	4	0	-1
26.	https://id.gov.ua/	Integrated electronic identification system	0	0	1	1	1	0	1	0	0	1	5	5	5	0	0
27.	https://data.gov.ua/	Unified state web portal of open data	1	0	1	1	1	0	0	0	0	1	5	5	5	0	0
28.	https://diia.gov.ua	Nationwide service Diia	0	1	0	0	1	0	0	0	0	0	2	2	2	0	0
29.	https://osvita.diia.gov.ua	Diia.Osvita	0	1	0	1	1	0	0	0	0	0	3	2	2	1	1
30.	https://business.diia.gov.ua	Diia.Business	1	1	1	1	1	1	1	0	0	0	7	7	7	0	0
31.	https://court.gov.ua/fair/	Search for court cases	0	1	0	1	1	1	0	0	0	0	4	5	H	-1	H
32.	https://guide.diia.gov.ua/	Guide to public services	1	0	1	1	1	1	0	0	0	0	5	5	6	0	-1
33.	https://center.diia.gov.ua/	Diia Center	0	1	0	0	1	1	1	0	0	0	4	4	4	0	0
34.	https://city.diia.gov.ua/	Diia City	1	0	0	1	1	1	0	0	0	1	5	5	4	0	1
35.	https://e.land.gov.ua/services	Web resource of electronic services of the State GeoCadastre	0	1	1	0	1	1	1	0	0	1	6	7	7	-1	-1
36.	https://cabinet.tax.gov.ua/	Electronic Cabinet of the taxpayer of the State Tax Service	1	1	0	0	1	1	1	0	0	0	5	8	6	-3	-1
37.	https://asvpweb.minjust.gov.ua/#/search-debtors	Search for enforcement proceedings	0	0	1	1	1	0	0	1	1	0	5	3	H	2	H
38.	https://portal.pfu.gov.ua/sidebar/Templates/Default	E-services portal of the Pension Fund of Ukraine	0	0	1	1	1	0	1	0	0	0	4	4	4	0	0

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
39.	https://rezerv.gov.ua/	State Reserve Agency of Ukraine	1	0	1	1	1	1	1	0	0	0	6	5	H	1	H
40.	https://policy.mtsbu.ua/	Checking the validity of the CMTPL insurance policy	0	1	1	1	1	0	0	1	0	1	6	6	H	0	H
41.	https://corruptinfo.nazk.gov.ua/	Unified state register of persons who have committed corruption or corruption-related offenses	0	0	1	1	0	1	0	0	0	1	4	5	H	-1	H
42.	https://legalaid.gov.ua/	Free legal aid	0	1	1	1	1	1	1	0	1	1	8	8	H	0	H
43.	https://fiu.gov.ua	State financial monitoring	1	0	1	1	1	1	0	0	0	0	5	7	H	-2	H
44.	https://e-services.davr.gov.ua	Portal of electronic services, State Agency of Water Resources of Ukraine	1	0	1	1	1	1	1	0	1	1	8	8	8	0	0
45.	https://e-services.msp.gov.ua/	Appointment of assistance at childbirth	0	1	0	1	1	1	1	1	1	0	7	7	7	0	0
46.	https://wanted.mvs.gov.ua/passport/	Checking the passport in the database of stolen or lost items	1	1	1	0	1	0	1	0	1	1	7	7	H	0	H
47.	https://dmsu.gov.ua/services/online.html	Online registration in the electronic queue	0	0	0	0	1	1	0	0	1	0	3	3	3	0	0
48.	https://bf.dii.gov.ua/	Diia.Barrier-Free Environment	1	1	1	1	1	1	1	1	1	1	10	10	H	0	H
49.	https://www.spfu.gov.ua/	State Property Fund of Ukraine	0	1	0	1	0	1	0	0	0	1	4	3	3	1	1
50.	https://dpsu.gov.ua/ua/map	Interactive map of checkpoints / Entry-exit checkpoints	0	0	0	0	1	1	1	0	0	0	3	2	4	1	-1
51.	https://lms.e-school.net.ua/	All-Ukrainian school online	0	1	1	1	1	1	0	1	1	1	8	8	H	0	H
52.	https://registry.edbo.gov.ua/	Register of educational entities	1	1	1	1	1	1	1	0	0	0	7	8	3	-1	4
53.	https://e-services.dsns.gov.ua/	Portal of electronic services	0	1	0	1	1	1	1	0	1	1	7	7	7	0	0
54.	https://nszu.gov.ua/	National Health Service of Ukraine of Ukraine	0	1	0	0	1	0	1	0	0	0	3	H	H	H	H
55.	https://spending.gov.ua/login	Single web portal for the use of public funds	0	0	0	1	1	0	1	0	0	1	4	3	3	1	1
56.	https://acskidd.gov.ua/manage-certificates	Repeated (remote) formation of certificates by electronic request	0	0	0	1	0	1	0	0	1	1	4	4	3	0	1

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
57.	https://czo.gov.ua/verify	Online service for verification of qualified electronic signature or seal for electronic documents	0	1	1	1	1	1	1	0	1	1	8	6	5	2	3
58.	https://nads.gov.ua/	National Agency of Ukraine on Civil Service	0	1	0	1	1	0	0	0	0	1	4	H	H	H	H
59.	https://info.edbo.gov.ua/edu-documents/	Register of documents on education	0	1	1	1	1	1	1	0	0	0	6	6	4	0	2
60.	https://dsns.gov.ua/	State Emergency Service	1	0	0	0	1	1	0	1	1	1	6	5	H	1	H
61.	https://id.court.gov.ua/	Electronic Court	1	1	1	1	1	0	1	0	1	1	8	8	7	0	1
62.	https://online.minjust.gov.ua/dokumenty/choise	Online House of Justice	0	0	0	1	1	0	0	0	0	1	3	3	3	0	0
63.	https://wanted.mvs.gov.ua/searchtransport/	Vehicles on a wanted list	1	1	1	0	1	0	1	0	1	1	7	7	6	0	1
64.	https://petition.president.gov.ua/	Electronic petitions, representation of the President of Ukraine	0	1	0	0	1	0	1	0	0	1	4	4	4	0	0
65.	https://itd.rada.gov.ua/services/Account/LogOn?returnUrl=%2Fservices%2FPetition%2FCreate	Electronic services	0	1	1	1	0	0	1	0	1	1	6	6	7	0	-1
66.	http://www.drlz.com.ua/	Register of Medicinal Products	1	0	1	1	1	0	1	0	1	1	7	7	H	0	H
67.	https://nabu.gov.ua/	National Anti-Corruption Bureau of Ukraine	0	0	1	0	1	1	1	0	0	0	4	H	H	H	H
68.	https://reyestr.court.gov.ua/	Unified State Register of Court Decisions	0	1	1	1	0	0	1	0	1	1	6	6	6	0	0
69.	https://ek-cbi.msp.gov.ua/	Electronic Cabinet of a person with disability	1	1	1	1	1	1	1	0	1	0	8	5	H	3	H
70.	https://www.npu.gov.ua/	National Police of Ukraine	1	1	0	1	1	0	0	0	0	1	5	H	H	H	H
71.	https://ern.minjust.gov.ua/pages/default.aspx	Unified Register of Notaries	1	0	0	1	1	0	0	1	1	0	5	6	5	-1	0
72.	https://apostille.minjust.gov.ua/	Unified Register of Apostilles	0	1	0	0	0	0	1	0	1	1	4	4	4	0	0

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
73.	https://pasport.org.ua/poslugi	Services of centers "Passport Service"	1	1	0	1	1	0	0	1	0	1	6	6	6	0	0
74.	https://e-construction.gov.ua/	Portal of the state electronic system in the field of construction	0	1	0	0	1	0	1	0	0	1	4	6	4	-2	0
75.	https://usr.minjust.gov.ua/content/free-search	Unified state register of legal entities, individual entrepreneurs and public formations (free search)	0	1	1	0	1	1	1	0	1	1	7	7	7	0	0
76.	http://cg.gov.ua/	Chernihiv Regional State Administration	1	0	0	0	1	0	0	0	0	1	3	3	2	0	1
77.	http://www.vin.gov.ua/	Vinnytsia Regional State Administration	1	1	1	1	1	1	1	1	1	1	10	4	3	6	7
78.	http://voladm.gov.ua/	Volyn Regional State Administration	0	1	1	1	1	1	1	0	0	1	7	4	4	3	3
79.	http://adm.dp.gov.ua/	Dnipropetrovsk Regional State Administration	0	0	0	1	1	0	0	0	0	0	2	2	2	0	0
80.	http://dn.gov.ua/	Donetsk Regional State Administration	0	1	0	1	0	0	0	0	0	0	2	2	2	0	0
81.	https://oda.zht.gov.ua/	Zhytomyr Regional State Administration	1	0	0	0	1	1	1	0	0	0	4	2	3	2	1
82.	https://carpathia.gov.ua/	Zakarpattia Regional State Administration	0	1	0	0	1	0	0	0	0	1	3	2	2	1	1
83.	https://www.zoda.gov.ua/	Zaporizhzhia Regional State Administration	0	0	0	0	1	0	0	0	1	0	2	2	3	0	-1
84.	https://www.if.gov.ua/	Ivano-Frankivsk Regional State Administration	0	0	0	0	1	0	0	0	0	1	2	2	2	0	0
85.	http://koda.gov.ua/	Kyiv Regional State Administration	1	1	0	1	1	1	0	0	0	0	5	4	6	1	-1
86.	http://www.kr-admin.gov.ua/	Kirovograd Regional State Administration	1	0	0	1	1	0	1	0	1	0	5	5	5	0	0
87.	http://www.loga.gov.ua/	Luhansk Regional State Administration	0	1	0	0	1	1	0	1	0	1	5	5	3	0	2
88.	https://loda.gov.ua/	Lviv Regional State Administration	1	1	1	1	1	1	1	1	1	1	10	7	0	3	10
89.	http://www.mk.gov.ua/	Mykolaiv Regional State Administration	0	0	0	1	1	1	0	0	0	1	4	4	3	0	1
90.	https://oda.od.gov.ua/	Odesa Regional State Administration	1	0	0	0	1	1	0	1	0	1	5	5	4	0	1

#	Reference	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	BA 2023	BA 2022	BA 2021	Progress / year	Progress / 2 years
91.	https://poda.gov.ua/	Poltava Regional State Administration	0	1	1	1	1	1	0	1	1	1	8	5	5	3	3
92.	https://www.rv.gov.ua/	Rivne Regional State Administration	0	0	0	0	1	0	0	0	0	1	2	2	2	0	0
93.	http://sm.gov.ua/	Sumy Regional State Administration	1	0	0	1	1	1	1	0	0	1	6	6	5	0	1
94.	https://oda.te.gov.ua/	Ternopil Regional State Administration	0	0	0	1	1	0	0	0	0	1	3	2	2	1	1
95.	https://kharkivoda.gov.ua/	Kharkiv Regional State Administration	1	1	1	1	1	1	1	1	1	0	9	9	5	0	4
96.	https://khoda.gov.ua/	Kherson Regional State Administration	0	0	0	0	1	1	0	0	0	1	3	3	3	0	0
97.	http://www.adm.km.ua/	Khmelnyskyi Regional State Administration	0	0	0	0	1	1	1	0	0	0	3	4	4	-1	-1
98.	https://ck-oda.gov.ua/	Cherkasy Regional State Administration	0	0	0	1	1	1	1	0	0	0	4	4	4	0	0
99.	https://bukoda.gov.ua/	Chernivtsi Regional State Administration	0	1	0	0	1	0	0	0	0	1	3	3	3	0	0
100.	https://grants.vzaemo.diia.gov.ua	Electronic tender space	0	1	0	0	1	0	1	0	0	1	4	4	4	0	0
Total achieved (in points)			33	58	35	66	86	56	48	19	33	58					
Total achieved (in percentage)			33%	58%	35%	66%	86%	56%	48%	19%	33%	58%					

Appendix 2.

Basic accessibility monitoring methodology

General provisions

This methodology defines:

- main criteria of the indicator for monitoring the level of basic accessibility of websites of government authorities for users with visual, hearing, musculoskeletal, speech and intellectual disabilities, as well as with various combinations of disabilities in accordance with DSTU ISO/IEC 40500:2015 "Information Technology. W3C Web Content Accessibility Guidelines (WCAG) 2.0" (hereinafter referred to as accessibility monitoring);
- values of points used to measure the said criteria;
- a mechanism for assessing the achievement of indicators and their criteria;
- preparation and submission of reports on monitoring results (hereinafter referred to as the monitoring reports).

In the methodology, the terms are used within the meaning given in the Resolution of the Cabinet of Ministers of Ukraine No. 3 dated 04.01.2002 "On the Procedure for Publication of Information on the Internet about Activities of Executive Authorities" and DSTU ISO/IEC 40500:2015 "Information Technologies. W3C Web Content Accessibility Guidelines (WCAG) 2.0".

I. Criteria of accessibility indicator and the amount of measuring points

The list of main criteria of the indicator is set out in *Appendix 1*.

Criteria of accessibility indicator are based on DSTU EN 301 549:2022. Compliance of the criteria of accessibility indicator with the criteria of the WCAG 2.1 standard is defined in *Appendix 1*.

Criteria of accessibility indicator should be understood subject to the following:

Criterion 1. Sufficient text contrast – the contrast ratio of any text on the page relative to the background is at least 4.5:1.

Criterion 2. Availability of alternative text for all images – all images have alternative text provided using the alt attribute. If one or several images do not have the alt text, **the criterion is considered unachieved**.

Criterion 3. Availability of accessible text for all hyperlinks – hyperlinks have visible text or, if an icon or an image is used instead of visible text, a hidden text label is provided that is accessible to screen readers. If one or several hyperlinks do not have accessible text, **the criterion is considered unachieved**.

Criterion 4. Availability of text labels for all buttons – buttons have visible text or, if an icon or an image is used instead of visible text, a text label accessible to screen readers is provided. If one or several buttons do not have a text label, **the criterion is considered unachieved**.

Criterion 5. Availability of text labels for form fields – each field has a text label, that describes its purpose and does not disappear after entering information. If one or several fields do not have text labels or the text label disappears after entering information in that field, **the criterion is considered unachieved.**

Criterion 6. Software definition of main language of the page – main language of the page is specified using the lang attribute. If the lang attribute is missing or its value does not correspond to language in which the page content is presented, **the criterion is considered unachieved.**

Criterion 7. Lack of errors in the page code – the page code complies with the specification of HTML and other languages that are used, such as WAI ARIA. If the page contains more than one element with the same value of the id attribute or violates the WAI ARIA markup rules, **the criterion is considered unachieved.**

Criterion 8. Providing a mechanism to quickly navigate to main content of the page – if a menu or other secondary content is placed before main content of the page, then the header of the website should contain a link that takes to the beginning of main content of the page.

Criterion 9. Marking the keyboard focus – when navigating using the keyboard, the position of the keyboard focus can be determined visually. If when navigating using the keyboard, the marking of one or more elements is missing, **the criterion is considered unachieved.**

Criterion 10. Keyboard control support – all hyperlinks, buttons, input fields, and other elements that can be focused using the mouse, can also receive focus using the keyboard. If one or several elements that can receive focus using the mouse do not receive focus using the keyboard, **the criterion is considered unachieved.**

II. Assessment data

The assessment of the indicator and its criteria is based on the data obtained as a result of visual inspection of the website pages and analysis of the website code using special tools designed to check accessibility.

The monitoring subjects and bodies involved in the monitoring, at their own determine the source of assessment data for each indicator criterion at their own discretion, unless otherwise determined by the procedure for information interaction between the monitoring system and electronic information resources of the said entities and bodies.

III. Assessment of the achievement of the basic accessibility indicator and its criteria

Assessment of the achievement of the indicator criteria by the measurement unit “1/0”

If, according to the assessment data, the indicator criterion:

- 1) **is achieved** – the measurement unit of the indicator criterion is set to “1”.
In this case, the score is equal to 1 point;
- 2) **is not achieved** – the measurement unit of the indicator criterion is set to “0”.
In this case, the score is equal to 0 points.

Assessment of achievement of the basic accessibility indicator by the measurement unit “0–10”

The basic accessibility indicator is equal to the sum of points of all its criteria.

Determining the level of basic accessibility

The level of basic accessibility of a website is calculated on the basis of the basic accessibility indicator on the following scale:

- 0-3 points – low level of basic accessibility;
- 4-6 points – average level of basic accessibility;
- 7-8 points – sufficient level of basic accessibility;
- 9-10 points – high level of basic accessibility

IV. Procedure for compiling and submitting monitoring reports

The monitoring report form is defined in Appendix 2. This form consists of 3 sections.

In section 1 “General information”:

- line “Indicator name” indicates the name of the indicator “Basic accessibility”;
- lines “Reporting period from” and “Reporting period to” indicate the start and end dates of the reporting period in the format dd.mm.yyyy respectively. The start date of the current reporting period is the date following the end of the previous reporting period;
- column “Data source” indicates the software that was used to collect data.

In Section 2 “Websites, indicator criteria and their scores”:

- column “Website” indicates the website address (for example: kmu.gov.ua);
- column “1”, “2”, ..., “10” indicates relevant score of the criterion from 1 to 10 for this website (0 or 1);
- column “Basic accessibility” indicates the value of indicator “Basic accessibility” of this website (from 0 to 10).

Section 3 “List of unachieved indicator criteria and recommendations for elimination of reasons for non-achievement” indicates the indicator criteria that were not achieved, as well as recommended actions aimed at elimination of reasons for this.

Annex A to the Methodology

Criteria of basic accessibility indicator

Criterion	WCAG success criterion
1. Sufficient text contrast	1.4.3
2. Availability of alternative text for all images	1.1.1
3. Availability of accessible text for all hyperlinks	4.1.2
4. Availability of text labels for all buttons	4.1.2
5. Availability of text labels for form fields	4.1.2
6. Software definition of main language of the page	3.1.1
7. Lack of errors in the page code	4.1.1
8. Providing a mechanism to quickly navigate to main content of the page	2.4.1
9. Marking the keyboard focus	2.4.7
10. Keyboard control support	2.1.1

Appendix B to the Methodology

Example of the monitoring report form

I. General information

Name of the indicator	Basic accessibility
Reporting period from	
Reporting period to	
Data source	(software used for data collection)

II. Websites, indicator criteria and their scores

Website	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Basic accessibility
(site.gov.ua)											

III. List of unachieved indicator criteria and recommendations for elimination of reasons for non-achievement

_____ (code and name of the criterion)

Number of websites that did not achieve this criterion: __%

Recommendations for elimination of reasons for non-achievement of the criteria:
