





Assessment

of Accessibility of Information and Notification during Crises and Humanitarian Response

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All opinions and conclusions presented in this report are the expression of its authors and do not necessarily coincide with the views of the UNPRPD or the UN agencies implementing the Joint Programme "Mainstreaming gender-responsive disability inclusion in the humanitarian response in Ukraine".

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Terms and Abbreviations

ASC	administrative service centre
AU SCO	All-Ukrainian Civil Society Organisation
СМИ	Cabinet of Ministers of Ukraine
со	charitable organisation
Code	Civil Protection Code of Ukraine
DBN	State Building Norms
FGS	focus group study
Guidelines	Guidelines on Planning Evacuation Activities approved by Order of the MIA of Ukraine No. 579 of 10 July 2017
IDP	internally displaced person
MIA	Ministry of Internal Affairs
Ministry for Reintegration	Ministry for Reintegration of the Temporarily Occupied Territories of Ukraine
ОМА	oblast military administration

Resolution No. 733	Resolution of the Cabinet of Ministers of Ukraine No. 733 of 27 September 2017 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection"
RMA	raion military administration
RMPG	reduced-mobility population groups
sco	civil society organisation
SES	State Emergency Service
TIN	Taxpayer Identification Number
UAoB	Ukrainian Association of the Blind
UN	United Nations
UNDP	United Nations Development Programme
USoD	Ukrainian Society of the Deaf
VRU	Verkhovna Rada of Ukraine

Introduction

The assessment of the accessibility of notification and alerting for persons with disabilities during crises and humanitarian response in Ukraine was conducted August to October 2022 in the context of Russia's full-scale invasion of Ukraine, which started on 24 February 2022, and martial law in Ukraine.

The objectives of the assessment were:

- 1. To furnish the Ukrainian Parliament Commissioner for Human Rights with evidentiary instruments for work to increase information accessibility to persons with disabilities.
- 2. To develop recommendations for enhancing the capacity of public authorities to provide accessible notification and alerting for persons with disabilities during crises and humanitarian response.

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Summary of the Study

Executive summary

The assessment of the accessibility of notification and alerting in crises and during the humanitarian response in Ukraine was conducted in September and October 2022, based on the approved methodology (Annex 1). The study used a combination of methods: desk review, observation, focus group interviews, semi-structured expert interviews, and checklists.

The desk review was conducted to analyse Ukraine's legislation in the field and covered the analysis of twenty legal and normative acts. During the observation, there were forty-five telephone calls and four visits to social protection structural subdivisions and ASCs. Forty-two persons with sensory, mobility, intellectual, and/or cognitive impairments participated in the focus group interviews. Seventeen expert interviews were conducted with representatives of central, regional, and local authorities and representatives from civil society organisations working with persons with disabilities. The checklists developed to assess the accessibility of information within this study were used to analyse thirty-three digital notification and alerting channels.

This study includes analysis of three aspects of notification and alerting during crises and humanitarian response: **legislative norms** in this field in Ukraine and the extent of their implementation; **communication needs** of persons with disabilities; and, **conformity of official notification channels** to the requirements for accessible information. Based on the assessment, this report also offers public authorities at different levels recommendations on how to improve accessibility of information to persons with disabilities during crises and humanitarian response.

Study limitations

One of the study's limitations was that assessment of telephone communication channels and information boards in social protection structural subdivisions and ASCs was only performed in four regions of Ukraine. Hence, the findings are not representative at the national level. Interviews with elderly persons with disabilities were only conducted in Kyiv; as such, the results of this study component are also not representative at the national level.

The use of online focus group surveys also had some disadvantages, despite the dominant convenience of this method. Thus, the online format enabled surveying persons with disabilities who had experienced displacement and evacuation and were abroad or in other settlements in Ukraine as of the study period. However, the disadvantages have three aspects:

- 1. The online survey created selection bias since the focus group could only include respondents with access to a smartphone, a tablet, a laptop, and the Internet.
- 2. Technical difficulties, such as poor connection, could hinder discussion and make it difficult for the researchers to observe the participants.
- 3. Focus group participants could get distracted more often during the online participation format, for instance, by social media messages or household issues.

Another limitation was that the study did not assess the Cell Broadcasting notification system introduced by the SES for alerting. The SES completed the evaluation of the system at the end of September 2022, when the study's primary data collection stage had already been finalised.

Key findings — strengths

Legislative norms on the accessibility of notification and alerting in crisis situations in Ukraine

The civil protection legislation in Ukraine contains the **norms that require notification and alerting in an accessible format** for persons with physical, mental, intellectual, and sensory impairments. There are also **minimum instructions** for ensuring the accessibility of information for persons with hearing and vision impairments. The importance of notification in an accessible format in crises must be recognised.

The **notification channels** established by legislation are **pretty versatile** and cover audio and visual types of perception, which is essential for persons with sensory impairments.

Different public authorities are **responsible for alerting in crises**. Thus, the central administrative authorities for civil protection, namely the SES, and local authorities are responsible for **general alerting**. The local and central executive authorities and the SES notify **civil protection facilities**.

The evacuation commissions established by major and local authorities are responsible for **evacuation** alerting. Therefore, the most important notification areas have responsible entities designated by legislation.

Conformity of official notification channels to the requirements for accessible information

Use of visual formats to present information (namely infographics to inform the population about the rules of conduct and social assistance; maps to notify about the location of shelters) is a good practice that makes information more accessible to persons with hearing impairments or cognitive impairments. Information on the availability of temporary accommodation, humanitarian assistance, and notification via social media are primarily provided in simple and straightforward language, which is also essential for this group of persons.

As for the accessibility of notifications for persons with hearing impairments, some officials use **sign language interpreting on social media** to bring the information to the attention of these persons. Some social protection structural subdivisions have **communication means that involve sign language interpreters**. The **mobile application "Air Raid Alert", which considers all types of information perception**, including tactile, is accessible to different categories of persons with hearing impairments.

Key findings — challenges

Legislative norms

The civil protection legislation of Ukraine requires that information on crisis situations be brought to the attention of persons with disabilities in an accessible format. However, **no document contains or refers to detailed instructions** on how to implement this requirement. Brief instructions on the accessibility of information in the Code and in Resolution No. 733 are given in terms of accessibility for persons with vision and hearing impairments. They are limited to sign language interpreting for audio information and audio comments for visual information. The legislation of Ukraine pays less attention to the accessibility of information to persons with physical, mental, and/or intellectual impairments.

The legislation norms that now regulate the accessibility of information are not sufficiently clear and imperative. Also, the legislation **does not provide for liability for failure to consider the rights and interests of persons with disabilities** when alerting and notifying the population during crises and humanitarian response. In particular, there is no entity that would have the legislative right to monitor and analyse the accessibility of information and alerts, and to impose liability for violating the legislative norms.

As the analysis has shown, the designated notifying entities mostly **have no knowledge** of how to duly alert persons with disabilities taking account of the peculiarities of their impairments (vision, hearing, speech, intellectual, mental, and other impairments).

In general, the civil protection legislation of Ukraine does not ensure compliance with Article 11 of the UN Convention on the Rights of Persons with Disabilities. It is prescribed by Article 11 of the Convention that State Parties shall take all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies, and natural disasters.

The alerting and notification **channels** for crisis situations that are prescribed by Ukraine's legislation fail to consider the **tactile perception type**. However, this type of perception is critical for persons with sensory impairments. It is important to create channels that transmit information in a touch format, namely vibration.

Communication needs of persons with disabilities

The need for tactile notification formats has been confirmed by analysing the communication needs of persons with disabilities. Thus, **persons with hearing impairments** need vibration signals and text messages with emergency alerts. It is essential to furnish prompt written information on evacuation and interpret video and audio messages into sign language from the first days of a crisis. Also, information on available aid must be presented in simple language or in a format easy to read for this category of persons.

The availability of text or audio information that repeats information from web-space images is critical for persons with **vision impairments**. This applies to rules of conduct, maps for shelters, assistance algorithms, and other information often provided in infographics. As for evacuation, the most important things are clear information on evacuation transport and sufficient illumination for written communication to be perceived. Moreover, the contrast between background and text colours and the use the fonts that are easy to read are important for this category of persons.

The availability of information on rules of conduct during an air raid alert and the accessibility of shelters for persons with **mobility impairments**, namely users of wheelchairs, is most critical for this group of persons. Additionally, written and visual information must be posted in well-visible places from different angles.

The communication needs of persons with **intellectual impairments** are also mostly associated with available information on evacuation algorithms and rules of conduct in emergencies accounting for the needs of this group of persons. In particular, written instructions must be given in an easy-to-read format.

Accessibility to information on social assistance at the same place (single point of contact), both online and by telephone and in printed announcements and postal notices, is essential for older people. Similar to the other categories of persons, the elderly need to be alerted in crises in the form of text messages, regardless of Internet connection.

Conformity of official notification channels to requirements for accessible information

An analysis of digital channels for notification during crisis situations and humanitarian response has shown that a considerable share of the communication needs of persons with disabilities is not taken into consideration. That is, visual information, namely infographics, often fails to be accompanied by text or audio; video information, including those from national leaders, is rarely interpreted into sign language. Furthermore, information on rules of conduct and social assistance often contains very long sentences and is too difficult to understand, especially when a person is stressed and anxious; the information is provided as continuous text, important pieces are not highlighted, the most important information is not presented at the beginning, there are no bulleted lists, etc.

As for **notification about social assistance for internally displaced persons at the local level**, in social protection structural subdivisions, there are a number of violations of the requirements for information accessibility. Only digital channels or only personal on-site consulting are sometimes used to provide information on social assistance; there are mostly no means of communication for persons with hearing impairments, and employees are sometimes not ready to communicate with clients with hearing impairments in writing.

Principal recommendations

For some issues faced by Ukraine in accessible alerting and notification during crises and humanitarian response to be resolved, it is proposed to develop and approve the Governmental Action Plan for Eliminating Legislative Gaps in Notification and Alerting of the Population during Crises and Humanitarian Response (hereinafter, the "Plan"). It is recommended to establish an adequate system for proper notification and alerting of the population adapted to the needs of persons with vision, hearing, intellectual, and mental impairments. The active participation of persons with disabilities in developing the Plan must be ensured. The Plan shall include, without limitation, the following tasks:

- 1. Add provisions on ensuring accessible notification and alerting of the population during crises and humanitarian response in specialised legislation for the entities responsible for such alerting and notification.
- 2. Expand the norms of civil protection legislation, in terms of alerting and notifying the population of the threat or occurrence of emergency situations, with the requirement for notification in simplified language and easy-to-read format for persons with intellectual impairments.
- 3. Determine and designate at the legislative level the entity (the proposed entity is the SES) that would be obliged to monitor and analyse the accessibility of alerting and notification of the population in crisis situations for persons with vision, hearing, mobility, intellectual, mental impairments; and who would have the right to initiate imposing liability upon offenders. Delegate to such entity the functions of expert examination of information products and notices in crisis situations in an accessible format, in particular, for use thereof by the public authorities who are directly responsible for notifying the population.

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- 4. Develop and approve national standards (where available, to render the respective international standard effective) for using certain formats for providing information during notification and alerting of the population during crises and humanitarian response, in particular:
 - simplified language and easy-to-read format;
 - sign language;
 - subtitles:
 - audio description;
 - Braille Font, increased font size.
- 5. Oblige public authorities and television channels to make contracts with natural and legal persons who provide sign language interpreting services in order to adapt notifications of such public authorities and television channels during crises and humanitarian response to the needs of persons with hearing impairments.
- 6. Regulate the operations of hot lines for public authorities so that they would have a video call function with the participation of a sign language interpreter, with whom the public authority enters into a service contract.

SECTION 1. Ukrainian Legislation on Alerting and Notification

According to the methodology, the analysis of the Ukrainian legislation, or the desk review, had the following tasks:

- to identify the existing provisions that regulate accessibility of notification and alerting for persons with disabilities;
- to identify the available instructions on using necessary notification formats and channels in order to ensure accessibility of information to persons with disabilities during humanitarian response and crisis situations.

The desk review analysed twenty legal and normative acts on notification and alerting of the population (Annex 2) to establish how matters of accessibility were considered for persons with disabilities.

The list of legal and normative acts was made based on a preliminary analysis of legislation, the results of inquiries for public information submitted to the SES, and findings from semi-structured interviews with representatives of central, regional, and local authorities within the framework of the study.

The Civil Protection Code of Ukraine (hereinafter the "Code") interprets the concept of alerting in the context of crisis situations in Article 2(31) as follows:

Alerting – bringing the signals and notices from civil protection administrative authorities about the threat and occurrence of emergency situations, accidents, disasters, epidemics, fires, etc. to the attention of central and local executive authorities, undertakings, institutions, organisations, and the population¹.

Therefore, the target group to be alerted in crisis situations is the population, undertakings, institutions, organisations, and central and local executive authorities. The civil protection administrative authorities are the entities that bring signals and notices to the attention of the target groups.

The concept of civil protection information is defined in the Code (Article 31(1)) as:

Civil protection information – data on the emergency situations that are forecast or have occurred, with their classification, area, and effects, as well as methods and means of protection from them².

¹ The Civil Protection Code of Ukraine No. 5403-VI (2012). https://zakon.rada.gov.ua/la,ws/show/5403-17#Text

² Ibid.

The concept of notification of the population in the field of civil protection is explained in Resolution No. 733 and refers to the needs associated with notification of persons with disabilities, specifically:

notification of the population in the field of civil protection — civil protection authorities providing via mass media, television, and radio networks data on emergency situations that are forecast or have occurred, with their classification, area, and effects, as well as methods and means of protection from them, as well as on their civil protection activities, including with due consideration of the peculiarities of notifying persons with physical, mental, intellectual, and sensory impairments³.

In other words, the definition refers to:

- notifying entities, i.e., civil protection administrative authorities;
- notification channels, namely mass media, television, and radio networks;
- the content of information messages, which includes:
 - classification of emergency situations that are forecast or have occurred;
 - their area and effects;
 - methods and means of protection from them;
 - information on civil protection activities;
- way of notification, considering special aspects of alerting persons with physical, mental, intellectual, and sensory impairments.

Based on the listed components that efficiently describe the core of notification in the field of civil protection, a report on legislation analysed has also been made:

- 1. Notifying and alerting entities
- 2. Notification and alerting channels
- **3.** Notification and alerting ways or availability of instructions on notification and alerting during crises and humanitarian response.

³ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

1.1. Notifying and Alerting Entities

The duty "to ensure alerting and notification of the population of the threat and occurrence of emergency situations, including in a format accessible to persons with vision and hearing impairments" is imposed upon the following authorities (the Code, Articles 18, 19):

- central executive authorities in the field of civil protection, except for the central executive authority responsible for implementing the public civil protection policy;
- Council of Ministers of the Autonomous Republic of Crimea;
- local state administrations;
- local self-government bodies in the field of civil protection⁴.

The civil protection administrative authorities furnish information via mass media in "a format accessible to persons with vision and hearing impairments"⁵.

At the same time, economic operators do not have to ensure the accessibility of information to persons with vision and hearing impairments; they only have to "post information on the safety precautions and corresponding conduct of the population in case of an accident" 6.

The following authorities are responsible for preparing notification of a threat or occurrence of emergency situations, in accordance with Resolution No. 733:

- State Emergency Service (SES);
- local executive authorities (local self-government bodies);
- heads of undertakings, institutions, and organisations with the alerting system⁷.

There is also a requirement for alerting persons with physical, mental, intellectual, and sensory impairments and other reduced-mobility population groups, including the persons who accompany them, in Resolution No. 733. Such alerting shall be organised by:

local executive authorities (local self-government bodies);

⁴ The Civil Protection Code of Ukraine No. 5403-VI (2012). https://zakon.rada.gov.ua/la,ws/show/5403-17#Text

⁵ Ibid, p. 31.

⁶ Ibid, p. 20.

⁷ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017), p. 20. https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

- owners of public facilities;
- heads of undertakings, institutions, and organisations of any ownership form where such persons work or can stay⁸.

Regarding installation of technical alerting devices

According to the Code and Resolution No. 733, the entities responsible for installing technical devices (signal and loud speakers, electronic information boards, radio room speakers, electric sirens) are:

- heads of the local self-government bodies;
- heads of undertakings, institutions, and organisations of any ownership form;
- owners of public facilities⁹.

The locations to install signal and loud speakers and electronic information boards are designated by the local self-government bodies and economic operators¹⁰.

Suppliers of electronic communication networks and/or services and television and radio organisations shall ensure technical broadcasting devices are connected to the automated central alerting systems. These entities shall also install special equipment for the automated transmission of signals and notices of a threat or occurrence of emergency situations¹¹.

The facility alerting systems that have to be created according to Resolution No. 733 are:

- in boarding facilities (for children; persons with physical, mental, intellectual, and sensory impairments; the elderly);
- at UAoB and USoD undertakings, institutions, and organisations;
- at other undertakings, institutions, and organisations that provide services to persons with disabilities and other reduced-mobility population groups determined by the local executive bodies and local self-government bodies;
- at the work places of persons with disabilities and reduced-mobility population groups.

Heads of such facilities shall be responsible for designing, creating (reconstructing), and ensuring the operation of such facility alerting systems. Facility alerting systems shall also be integrated into the respective local or territorial automated centralised alerting system¹².

⁸ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017), p. 20. https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

⁹ Ibid

¹⁰ The Civil Protection Code of Ukraine No. 5403-VI (2012), p. 30. https://zakon.rada.gov.ua/la,ws/show/5403-17#Text

¹¹ Ibid

¹² Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

Regarding notification of civil protection facilities

According to the Civil Protection Basic Action Plan 2022, the following bodies and authorities shall be responsible for notifying civil protection facilities:

- SES;
- central and local executive authorities;
- economic operators in state or communal ownership (by agreement);
- local self-government bodies (by agreement)¹³.

Notification of the population about shelters shall include the following information:

- location of civil protection facilities and other facilities to be used as shelters in case of emergency situations;
- procedure for staying in such facilities:
- rules for behaving in such facilities, taking into account the accessibility thereof for persons with disabilities and other reduced-mobility population groups;
- readiness of the facilities for intended use.

The above-mentioned facilities are also responsible for creating generally accessible resources that would contain information on these specific matters¹⁴.

Regarding notification of the evacuation of the population

According to the Guidelines on Planning Evacuation Activities (hereinafter, "Guidelines"), the following bodies and authorities are responsible for planning the evacuation of the population in case of threat and from areas of hostilities:

- central executive authorities;
- Council of Ministers of the Autonomous Republic of Crimea;
- local state administrations;
- local self-government bodies;
- economic operators¹⁵.

The evacuation commissions are directly responsible for matters of evacuation, namely notification of and during the evacuation. Such commissions are established by the above-listed, designated bodies and authorities¹⁶.

¹³ By Ordinance of the Cabinet of Ministers of Ukraine No. 1742-p "On Approving the Civil Protection Basic Action Plan 2022" (2021). https://zakon.rada.gov.ua/laws/show/1742-2021-%D1%80#Text

¹⁴ Ibid

¹⁵ Order of the MIA of Ukraine No. 579 "On Approving the Guidelines on Planning Evacuation Activities" (2017). https://zakon.rada.gov.ua/laws/show/z0938-17#Text

¹⁶ Ibid.

Also, according to the Procedure for Evacuation in Case of the Threat or Occurrence of Emergencies, the evacuation commission shall be responsible for "the alerting, evacuation, and arrival of persons with disabilities and other reduced-mobility population groups, [...] namely persons with vision, hearing, locomotor, intellectual, and mental impairments, to assembly evacuation points at their place of residence"¹⁷. No recommendations or instructions on accessibility of alerting reduced-mobility groups are given by the Guidelines or by the Procedure for Evacuation in Case of the Threat or Occurrence of Emergencies.

Conclusions on notifying and alerting entities

According to Ukrainian legislation, both central administrative authorities in the field of civil protection (namely, the SES) and local authorities are responsible for alerting in crisis situations, in particular, in a format accessible to persons with disabilities. At the same time, contrary to the Civil Protection Code of Ukraine, Resolution No. 733 does not oblige the central authorities to alert reduced-mobility categories.

Technical alerting facilities shall be installed by local self-government bodies and economic operators. Both local and central executive authorities and the SES are responsible for notifying civil protection facilities. Evacuation commissions concurrently established by the central and local authorities are responsible for evacuation alerting and the overall planning of evacuation activities.

¹⁷ Resolution of the Cabinet of Ministers of Ukraine No. 841 "On Approving the Procedure for Evacuation in Case of the Threat or Occurrence of Emergencies (2013). https://zakon.rada.gov.ua/laws/show/841-2013-%D0%BF#Text

1.2. Notification and Alerting Channels

Several methods for alerting about the threat or occurrence of emergency situations are prescribed by Ukrainian legislation in accordance with the Code and with Resolution No. 733.

- 1. "Operation of national, territorial, and local automated systems for centralised alerting about the threat or occurrence of emergency situations, special, local and facility alerting systems" Facility alerting systems are most essential for this analytical report.
- A facility alerting system is a software and hardware suite that is created and used at an increased-risk facility and a public facility, and is designated to alert about the threat and occurrence of emergency situations with an area of possible impact within its territory.

The facility alerting system includes specialised devices for the alerting and notification of the population in public places and other technical alerting means.

Facility alerting systems are created and used without limitation:

- in boarding facilities (for children; persons with physical, mental, intellectual, and sensory impairments; the elderly);
- at UAoB and USoD undertakings, institutions, and organisations;
- at other undertakings, institutions, and organisations that provide services to persons with disabilities and other reduced-mobility population groups determined by the local executive bodies and local self-government bodies;
- at the work places of persons with disabilities and reduced-mobility population groups.¹⁹

¹⁸ The Civil Protection Code of Ukraine No. 5403-VI (2012). https://zakon.rada.gov.ua/la,ws/show/5403-17#Text

¹⁹ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

2. "Centralised use of public electronic communications networks, including mobile communications, specialised electronic communication networks, and electronic communications networks of economic operators, as prescribed by the Cabinet of Ministers of Ukraine. Also, use of national, regional, and local radio broadcasting and television networks and other technical information transmission (presentation) means".²⁰

In addition, according to Resolution No. 733, signals and notices of the threat of occurrence of or the occurrence of emergency situations for the population, as well as notification, are brought to the notice of the population by:

- National Public Television and Radio Company of Ukraine (JSC "NPTRCU");
- state and public television and radio companies;
- communal, public, and other television and radio organisations of any ownership form;
- electronic communications operators by means of public electronic communications networks (telephone communications, text messages);
- Internet resources (websites, social media).²¹
- **3.** "Operation of signal and loud speakers and electronic information boards in settlements, as well as public areas, to transmit information on civil protection matters"²².

Signal and loud speakers shall, without limitation, be installed in vehicles; according to Resolution No. 733, there shall also be electric sirens as an alerting channel²³.

According to this Resolution, there should also be radio room speakers to transmit information on civil protection. Such radio room speakers are installed at premises where services are provided to persons with disabilities and other reduced-mobility population groups. Radio room speakers are additionally installed at the work places of such persons²⁴.

The following notification channels are prescribed to notify the evacuated population of how to act in different situations and of the operational situation:

alerting system;

²⁰ The Civil Protection Code of Ukraine No. 5403-VI (2012). https://zakon.rada.gov.ua/laws/show/5403-17#Text

²¹ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

²² The Civil Protection Code of Ukraine No. 5403-VI (2012). https://zakon.rada.gov.ua/laws/show/5403-17#Text

²³ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

- radio broadcasting means;
- television.²⁵

No recommendations or instructions on accessible notification of persons with disabilities and reduced-mobility groups being evacuated are given by the legislation.

Conclusions on notifying and alerting channels

The Ukrainian legislation provides for a wide range of alerting and notification channels for crisis situations, namely:

- signal and loud speakers;
- electric sirens;
- radio room speakers;
- electronic information boards;
- television and radio communications;
- telephone communications, text messages, and other electronic communications;
- Internet resources (websites, social media);
- in general, facility alerting systems installed at facilities that, without limitation, are associated with persons with disabilities.

This wide range of notification and alerting channels is capable of satisfying the various information needs of persons with different functional impairments. For example, electronic information boards and telephone communications are convenient for persons with vision impairments; whereas, electronic information boards and text messages are suitable for persons with hearing impairments. Internet resources can be convenient for all users provided that the requirements of web accessibility under DSTU ISO/IEC 40500:2015 "Information technology. Web Content Accessibility Guidelines W3C (WCAG) 2.0." are met. At the same time, the existing notification and alerting channels only cover audio and visual types of information perception, and there are no channels of tactile perception, i.e., by touch.

²⁵ Resolution of the Cabinet of Ministers of Ukraine No. 841 "On Approving the Procedure for Evacuation in Case of the Threat or Occurrence of Emergencies (2013). https://zakon.rada.gov.ua/laws/show/841-2013-%D0%BF#Text

1.3. Ways for the Notification and Alerting of Persons with Disabilities and Other Reduced-Mobility Groups

References to and minimum recommendations on accessible ways for notification and alerting about emergency situations can mostly be found in the Civil Protection Code of Ukraine and Resolution No. 733.

Thus, according to Resolution No. 733, when the population is alerted about evacuation, signals and notices shall be brought to the attention of the following:

- persons with physical, mental, intellectual, and sensory impairments;
- senior executives of UAoB and USoD undertakings, institutions, and organisations;
- other undertakings, institutions, and organisations that provide services to persons with disabilities and other reduced-mobility population groups;
- work places of such persons (in an accessible format).²⁶

The warning signal "Attention all!", which is described in Resolution No. 733, does not provide for formats of information accessible to persons with vision impairments, e.g., light and sound signals. At present, such a signal provides for "intermittent sound of electric sirens, frequent signals by vehicles, in particular, recorded by radio broadcasting networks and via outdoor loud speakers".²⁷ At the same time, this Resolution regulates notification in a format accessible to persons with disabilities after the warning signal, when respective messages are broadcast in television and radio networks. In particular, the Resolution provides for information followed by sign language and/or subtitles if it is voice; and by audio comments, if it is visual²⁸. Notification via television and radio companies and organisations shall also be followed by sign language and/or subtitles, if it is voice; and by audio comments, if it is visual²⁹.

²⁶ Resolution of the Cabinet of Ministers of Ukraine No. 733 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection" (2017). https://zakon.rada.gov.ua/laws/show/733-2017-%D0%BF#Text

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

A list of technical means that are supposed to ensure the accessibility of information for persons with different functional impairments can be found in Resolution No. 733 and includes:

- acoustic beacons;
- light and sound alarm devices;
- audio commenting means;
- subtitling means;
- sign language interpreting;
- text messaging.³⁰

The Guidelines provide for establishing a separate unit responsible for evacuating persons with disabilities and reduced-mobility groups. For example, paragraph 3 contains the duty to include "methods for alerting and informing persons with disabilities subject to the nature of their disability" into this section³¹. Paragraph 9 contains the requirement to organise alerting "during the evacuation and notification of the population of how to act at different evacuation stages, to inform about the current situation in a format accessible to persons with disabilities and other reduced-mobility population groups"³². However, the Guidelines contain no specific instructions on ensuring such accessibility or references documents with such instructions.

Data on emergency situations of a man-made nature that are forecast or have occurred shall be brought to the attention of the population, including taking into account the special aspects of alerting persons with physical, mental, intellectual, and sensory impairments, in accordance with Order of the MIA of Ukraine No. 884³³. This Order contains no guidelines, instructions, or references.

Conclusions on the ways for the notification and alerting of persons with disabilities

Resolution No. 733 is the only legal and normative act that regulates notification and alerting in crisis situations and contains specific guidelines on the accessibility of information for persons with disabilities and other reduced-mobility groups. A number of other documents require the needs of persons with different functional impairments be considered when organising notification and alerting, but fail to explain how this shall be done.

³⁰ Ibid.

³¹ Order of the MIA of Ukraine No. 579 "On Approving the Guidelines on Planning Evacuation Activities" (2017), Title V. https://zakon.rada.gov.ua/laws/show/z0938-17#Text

³² Ibid

³³ Order of the MIA of Ukraine No. 884 "On Approving the Technical Requirements for the National Automated Central Alerting System" (2018), Title V, Paragraph 1. https://zakon.rada.gov.ua/laws/show/z1346-18#Text

At the same time, Resolution No. 733 does not give sufficiently detailed instructions on the accessibility of notification and is limited to the requirement of sign language interpreting or subtitling, audio comments, and a short list of technical means to ensure the accessibility of notification, without detailed explanations on how such means are supposed to be used.

Moreover, neither of the documents contains references to a simplified language or easy-to-read format, which is important for persons with intellectual and hearing impairments. There are also no requirements for contrasting colours or increased font size, which are important in terms of accessibility of information for persons with vision impairments; no requirements for pictograms in information messages, which is important to persons with intellectual and speech impairments and, in general, to stressed and anxious persons.

Conclusions on Ukrainian Legislation on Notification and Alerting during Crises and Humanitarian Response

Out of twenty legal and normative acts analysed, only eight consider notification and alerting of persons with reduced mobility, namely persons with disabilities, in crisis situations. The principal documents on alerting and notification is the Civil Protection Code and the Resolution of the Cabinet of Ministers of Ukraine No. 733 of 27 September 2017 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection". Both documents contain the requirement to bring information on an emergency situation to the attention of persons with disabilities in an accessible way. The Resolution also contains some specific guidelines on accessible notification.

When it comes to notifying and alerting entities, the Ukrainian civil protection legislation mostly imposes the responsibility for notification and alerting about emergency situations upon local authorities and central administrative authorities in the field of civil protection. At the same time, the central executive authorities share their responsibility for notification about evacuation activities and civil protection facilities and shelters with other notifying entities.

Quite versatile channels for information distribution and alerting about emergency situations are described in Ukrainian legislation. Such a variety of channels is supposed to ensure the accessibility of information to persons with different functional impairments since the channels convenient to different persons can be selected from a list subject to an impairment.

At the same time, in order to ensure complete accessibility, a channel that would cover tactile perception, which is important for persons with hearing and vision impairments, must be included. Such a channel is supposed to ensure, without limitation, vibration signals for hazards.

Resolution of the CMU No. 733 is the only document in the civil protection legislation that contains minimum instructions on the accessibility of information during crises and humanitarian response for persons with disabilities. In most other documents, such recommendations are limited to sign language interpreting for audio information and audio comments for visual information. The legal and normative acts have no references to or instructions on an easy-to-ready format, simplified language, Braille Font, general recommendations on web accessibility, etc.

Furthermore, the legislation often uses antiquated terms, such as "finger speech" instead of "sign language interpreting", or "defects" instead of "impairments". Such terms shall be replaced with adequate ones in pursuance of the Law of Ukraine "On Ratification of the Convention on the Rights of Persons with Disabilities and the Optional Protocol Thereto"³⁴.

³⁴ Law of Ukraine No. 1490-VIII "On Ratification of the Convention on the Rights of Persons with Disabilities and the Optional Protocol Thereto" (2016). https://zakon.rada.gov.ua/laws/show/1490-19#Text

SECTION 2. Communication Needs of Persons with Disabilities

In order to establish the communication needs of persons with disabilities and identify gaps in the existing practices of notifying and alerting the population during crises and humanitarian response, a focus group study (FGS) was conducted. A more detailed description of the focus group methodology and sampling can be found in Annex 1.

The following groups of respondents took part in the focus groups:

- persons with vision impairments (complete or partial blindness);
- persons with hearing impairments (complete or partial deafness);
- persons with locomotor impairments;
- persons with cognitive impairments;
- elderly persons with disabilities.

The FGS findings enabled establishing a range of communication needs for persons with disabilities in crisis situations.

2.1. Engaging Persons with Disabilities in Developing Notification Instruments and Mechanisms

The principal problem mentioned by respondents in all the surveyed groups was a lack of engagement of persons with disabilities in developing instruments and mechanisms for notifying the population in crisis situations before and after the full-scale invasion. Therefore, the existing instruments and mechanisms for notifying the population do not consider the needs of persons with disabilities, either in part or at all.

For example, sign language interpreters emphasised that, despite their resorts to central authorities, persons with hearing impairments and sign language interpreters had not been engaged in developing instruments and mechanisms for notifying the population in crisis situations. Moreover, the sign language interpreters noted that, despite their requests, interpreters had not been engaged to inform persons with disabilities via television news during the first days of the full-scale invasion.

The participants mentioned the problem of no engagement of persons with disabilities at the level of central and executive authorities. Thus, a respondent from Kyiv Oblast (respondent No. 19, a person with locomotor impairments, male, 34 years old) shared that he had contacted the city council before the start of the full-scale invasion regarding the action algorithm in case of a full-scale invasion for persons with disabilities, namely as to organisation of evacuation. According to the respondent, no answers were given, and during the full-scale invasion and occupation of the city "the authorities kept aloof".

Therefore, engagement of persons with disabilities and their organisations in developing and improving instruments and mechanisms for notifying the population in crisis situations at the central and local levels is a key need for persons with disabilities. Satisfaction of this need must be the first step to resolving other issues and gaps in notifying persons with disabilities of hazards.

2.2. Accessibility of Information on Evacuation for Persons with Disabilities

When they spoke about their personal evacuation experience, study participants mostly mentioned personal contacts and civil society organisations for persons with disabilities as sources of information on evacuation. In our study selection, the participants mostly organised their evacuation themselves, relied upon their family or friends, or were assisted by civil society organisations.

Lack of official information (from central and local authorities) on evacuation opportunities and routes put persons with disabilities in jeopardy. Thus, an FGS participant with hearing impairments (respondent No. 28, female, Chernihiv) shared that the independent evacuation process for her and her family was associated with material risks since they could not hear explosions on the way.

Accessibility of information on evacuation opportunities for persons with disabilities in the settlements in the vicinity of the front line remains an important communication need for persons with disabilities.

2.3. Accessibility of Information on the Action Algorithm in Case of Denial of the Right to Cross the Border for the Purpose of the Evacuation of Persons with Disabilities

Focus group participants, namely the men with hearing impairments who had experienced evacuation, said that they had had difficulty crossing the border although they had all the documents on their disability. This created additional barriers for persons with disabilities to leave for a safe location.

For example, respondent No. 12 (male, a person with hearing impairments, Odesa, 18 years old) told that he had not been allowed to cross the border during his first evacuation attempt and had been referred to the military enlistment office to obtain additional authorisation documents. It was hazardous for the respondent since he had to return to the city after curfew and was stopped at a checkpoint to give explanations. The respondent noted that he had not known how to act in that situation and had no contacts or hot line numbers that could be used for explanations and assistance.

Lack of information on the action algorithm in case of denial of the right to cross for the purpose of evacuation for persons with disabilities, as well as of a hot line they could use for such problem accessible to those using sign language or other contacts for persons with disabilities, remains a gap in the notification of persons with disabilities during the war.

2.4. Accessibility in Military Enlistment Offices of Information on Inspections and Authorisations for Persons with Disabilities to Go Abroad

The need of men with disabilities to obtain additional documents to go abroad has created another communication need for persons with disabilities: accessibility in military enlistment offices of information on the procedure for obtaining authorisation documents.

Respondent No. 6 (male, a person with hearing impairments, Odesa, 38 years old), who volunteered in Lviv and helped persons with hearing impairments be evacuated, noted that persons with disabilities, especially those with hearing impairments, had difficulties when they tried to obtain from military enlistment offices authorisation documents to cross the border. More specifically, military enlistment offices had no sign language interpreters for visitors with hearing impairments. For that reason, persons with disabilities needed much more time and effort to obtain the necessary documents. According to respondent No. 6 as well as other participants of the study, persons with disabilities, especially persons with hearing and/or vision impairments, relied upon volunteer help during inspections and other procedures in military enlistment offices. It must be noted that the volunteers were organised by civil society organisations for persons with disabilities.

2.5. Accessibility of Information on Obtaining IDP status and Social Benefits for Persons with Disabilities

In addition to the difficulty obtaining documents from military enlistment offices, FGS participants mentioned a lack of information on obtaining IDP status and social benefits. It was noted by respondents that they had had difficulty finding out the necessary actions and documents in the ASCs, and they had only been helped by volunteer sign language interpreters. It must be mentioned that, according to participants, the presence of volunteer interpreters was ensured by the effort of civil society organisations that helped persons with disabilities.

"The ASC was like a labyrinth through which I was guided by a volunteer interpreter," respondent No. 6 (male, a person with hearing impairments, Odesa, 38 years old).

Accessibility of information on obtaining IDP status and benefits from the state in ASCs and online remains an important communication need for persons with disabilities who have been forced to change their place of residence because of the war.

2.6. Accessibility of Notices from Central and Local Authorities and Mass Media with Sign Language Interpretation and Subtitles

As it has already been mentioned, respondents with hearing impairments and sign language interpreters noted that important information had been unavailable due to lack of sign language interpreting and/or subtitles, especially during the first days of the full-scale invasion. This makes persons with hearing impairments especially vulnerable since they have no access to operational information.

In addition to notices from the central and local authorities, it is extremely important to duplicate information on a national television marathon with sign language or subtitles in order to notify persons with hearing impairments who have no Internet access.

2.7. Accessibility of Information for Persons with Disabilities on How to Act in Case of an Air Raid or Artillery Attack Alert at Home

FGS participants mentioned that, especially at the beginning of the full-scale invasion, they lacked information on relatively safe areas at home where they could hide during an air raid alert. This was especially important as many of the respondents had no accessible shelters around. The participants explained that such information on mass media and television was not always accessible to persons with vision and hearing impairments. For example, information is provided as images that cannot be 'read' with screen readers. As for persons with hearing impairments, that information was not accessible in text format (e.g., as subtitles for news bulletins) and was not interpreted in sign language.

Fig. 1 shows an infographic about safe places in an apartment or house during an artillery attack. Information in such format is not accessible to persons with vision impairments as it cannot be processed with screen readers.



Fig. 1. Infographics "Life-saving rules"

Source: tsn.ua

2.8. Accessibility of Information on Receiving Humanitarian Assistance for Vulnerable Social Groups, Including Persons with Disabilities

Study participants from among elderly persons with disabilities mentioned a lack of information on how humanitarian assistance could be received. Thus, several respondents from Kyiv said that they could not obtain information on receiving food packages from the Social Policy Department of the Kyiv City State Administration at the Department's telephone numbers since nobody answered their calls to the hot line. Moreover, they could not find that information online since they had no Internet access. These elderly study participants said that, in the end, they failed to receive food packages from city authorities during the humanitarian crisis in Kyiv in February and March 2022.

As the study sampling included elderly persons with disabilities from Kyiv only, no conclusions can be made on the accessibility of information on humanitarian assistance in other settlements.

Conclusions on the Communication Needs of Persons with Disabilities

Study participants agreed upon the principal problem, which was a lack of engagement of persons with disabilities in developing notification instruments and mechanisms. This problem is a root cause of other problems and gaps in the notification of persons with disabilities during crises and humanitarian response.

The findings of our study also enable identifying other communication needs of persons with disabilities.

For persons with vision impairments

 Availability of text information that can be 'read' with screen readers or audio information, not only images. For example, shelter maps must be accompanied by a list of shelters in text format, and infographics must offer an audio version or alternative text.

- Sufficient illumination at railway stations and other assembly points for evacuation so that information on the train, bus, or other transport schedule can be easily seen.
- Clear announcement of the schedule and procedure for the departure of evacuation transport at railway stations and other assembly points.
- Provision of information with contrasting colours between the background and the text, font that is easy to read in type and size, without any abbreviations, with explanations on all the necessary documents, e.g., those for state benefits.

For persons with hearing impairments

- Provision of information in the accessible format on the crisis situation, rules of conduct, safe evacuation routes during the first days of a situation, with sign language interpreting or text in a simple language, namely on television, not only on the Internet.
- Availability of other communication channels in addition to telephone to book seats in evacuation transport.
- Availability of written information, namely on electronic boards, on the schedule and procedure for the departure of evacuation transport at railway stations and other assembly points.
- Availability of alerts as text messages, which are also delivered to users of pushbutton telephones and do not depend on Internet connection.

For persons with intellectual impairments

- Provision of information on action algorithms for those who accompany persons with intellectual impairments, namely on evacuation routes and available vehicles.
- Availability of information on rules of conduct during an air raid/artillery attack alert, evacuation opportunities, possible assistance, etc. in mass media and other resources in an understandable language.

For the elderly

- Availability of alerts as text messages, which are also delivered to users of pushbutton telephones and do not depend on Internet connection.
- Clear and loud announcement of the schedule and procedure for the departure of evacuation transport at railway stations and other assembly points.
- Possibility to obtain information on humanitarian and social support remotely, without having to attend respective locations (e.g., at humanitarian assistance points). Moreover, such information must be accessible to persons who have no (permanent) Internet access. For example, it can be provided by telephone, in text messages, printed notices, etc.

For persons with locomotor impairments

- Written and visual notices (e.g., boards with the schedule of evacuation transport at railway stations) must be posted in places that are well visible from different angles.
- Availability of information on accessible shelters and routes thereto.
- Development and dissemination of the rules of conduct during an air raid or artillery attack alert for persons with locomotor impairments.

SECTION 3.

Accessibility of Available Notification and Alerting Channels

National and regional notification and alerting channels and information products were analysed to identify the formats for notifying and alerting the population during crises and humanitarian response, and to assess conformity thereof to the requirements for accessibility of information for persons with disabilities.

Thirty-three notification and alerting channels were analysed and assessed: twenty regional and local websites (namely those of the OMA, raion military administrations and city heads) and thirteen national information channels (namely websites, social media and applications) (Annex 3). The list of channels was made in accordance with the methodology and by answers given by respondents in the focus group interviews conducted within the framework of this study.

The channels were analysed based on a checklist (Annex 3), which included five modules:

- **1.** Alternative text for non-text content
- 2. Text readability
- 3. User-friendly layout
- 4. Multimedia accessibility
- 5. Accessibility of certain website elements.

3.1. Website Accessibility

3.1.1. Websites of the central executive authorities

- Website of the Ministry for Reintegration of the Temporarily Occupied Territories (minre.gov.ua)
- Website of the Ministry of Social Policy of Ukraine (www.msp.gov.ua)
- Website of the State Emergency Service of Ukraine (SES) (dsns.gov.ua)

Alternative text for non-text content

The websites often contain information as images, e.g., banners, infographics, or rules of conduct during the war, which is not accompanied by text and has no alternative text. Such a format for information is inaccessible to users with vision impairments, who cannot 'read' information from images with their screen readers. It is also inaccessible to these users since when, images are zoomed in, the text there becomes pixelised, and it gets more difficult to read.

Text readability

The information is mostly provided in a simple and understandable language, in accordance with the basic readability requirements; pictograms are often used, which simplifies perception by persons with cognitive impairments. However, abbreviations that are not explained in the text are often used, e.g., TOT, ES, FM, BM, MIA, BBU. This makes it difficult to understand the text.

User-friendly layout

The text content is mostly easy to perceive visually. However, the text is sometimes placed against the background with patterns, and titles are written in capital letters, which makes it difficult for persons with vision impairments to perceive the information. A lot of textual information on the SES website is presented as continuous text that is not broken into paragraphs, and important information is not highlighted. Such poorly-structured information is hard to perceive.

The website of the Ministry of Social Policy of Ukraine should be noted as it contains a larger number of violations of the information accessibility requirements. In particular, the information is provided as extracts from legislation in complicated legal language, which is difficult to understand, especially for persons with intellectual impairments. Some information is also provided as scanned documents, which are not readable by screen readers and, therefore, not accessible to persons with vision impairments.

3.1.2. Websites of regional and local executive authorities

Oblast military administrations (OMA):

- Kyiv OMA (koda.gov.ua)
- Donetsk OMA (dn.gov.ua)
- Mykolaiv OMA (mk.gov.ua)
- Kharkiv OMA (kharkivoda.gov.ua)
- Chernihiv OMA (cg.gov.ua)
- Zaporizhzhia OMA (zoda.gov.ua)
- Sumy OMA (sm.gov.ua/uk)
- Poltava OMA (facebook.com/poltavaoda)
- Dnipropetrovsk OMA (adm.dp.gov.ua)
- Vinnytsia OMA (vin.gov.ua)

Raion military administrations (RMA)

- Kryvyi Rih RMA (krrda.dp.gov.ua)
- Bucha RMA (buchanska-rda.gov.ua)
- Myrhorod RMA (myrgorod.pl.ua)

City councils

- Kramatorsk City Council (krm.gov.ua)
- Kharkiv City Council (www.city.kharkov.ua)

In general, the websites of local authorities often fail to contain important information on crisis situations. In particular, the websites often have no information on evacuation routes, temporary shelters, or protective facilities. Such information is sometimes provided as news, so it is not on the menu and must be found in the newsfeed. This makes it difficult to find such information quickly, which is critical in crisis situations. Information on humanitarian and social assistance is sometimes not furnished in full; for example, there is no information on the documents needed to obtain assistance or the contact details of the institutions where this can be obtained.

Alternative text for non-text content

The <u>rules of conduct during the war</u> are very frequently presented as images with no alternative text (Fig.2).

ДІЇ ПІД ЧАС ОБСТРІЛУ



Якщо Ви знаходитеся маршрутному таксі, тролейбусі, трамваї:

- 1. Попросіть водія зупинити транспортний засіб.
- 2. Виходьте з транспортного засобу та відбігайте від дороги у напрямку від багатоповерхівок та промислових об'єктів та лягайте на землю, закрийте голову руками.

Якщо вибухи застали вас у дорозі на власному автомобілі— не розраховуйте, що на авто ви зможете швидко втекти від обстрілу. Зупиніться вийдіть з автомобіля та відбіжіть якомога далі від дороги, лягайте на землю, закрийте голову руками.

УКРИТИСЯ ПІД ЧАС ОБСТРІЛУ МОЖНА:

- у спеціально обладнаному бомбосховищі;
- у підземному переході;
- в будь-якій канаві, траншеї, ямі;
- в трубі водостоку під дорогою;
- вздовж високого бордюру чи підмурку паркану;
- у підвалі під капітальними будинками старої забудови;
 - в оглядовій ямі гаражу, станції технічного обслуговування;
 - в каналізаційних люках;
 - в "воронках", що лишилися від попередніх обстрілів.



Fig. 2. Checklist "What to do in an air raid"

Source: Website of Zaporizhzhia OMA, https://cutt.ly/NN7Bqu4

Information on <u>shelters</u> is often provided as maps, which are not accessible to persons with vision impairments (Fig. 3). Information should be additionally provided as text, i.e., list of addresses with names of facilities and notes on the accessibility of shelters for persons with disabilities.

Also, some other information on humanitarian and social assistance is posted as images with no alternative text. A convenient format for <u>lists of shelters</u> can be found on the Zaporizhzhia OMA website, namely as PDF lists accessible to screen readers with addresses, names of facilities, and number of seats in the shelters.³⁵

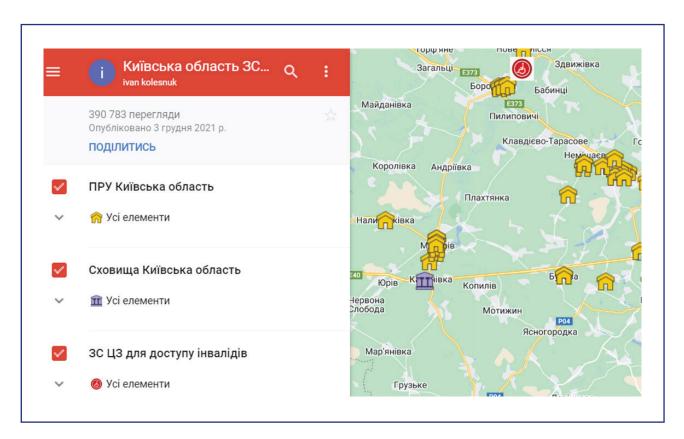


Fig.3. Map of Shelters in Kyiv Oblast

Source: Website of Kyiv OMA, https://cutt.ly/9N1WcB5

Text readability

Information on the websites is furnished in a complicated format, which makes it difficult to understand, especially in a crisis situation. The following is also used to present the information:

 very long sentences (100 to 130 words), while understandable text should be no more than fifteen words;

³⁵ Official website of Zaporizhzhia OMA (2022). Shelters in Zaporizhzhia Oblast. https://www.zoda.gov.ua/article/2603

- complex linguistic structures, like 'national security and defence activities' and 'civil protection alerting signals';
- the documents needed for IDP status are not explained, and no examples or tips are given regarding resources where such examples or templates can be found.

The websites sometimes use abbreviations that are not explained, e.g., JFO, TES and ES, ES, SWD. Some of the websites do not use bulleted lists or proper formats for telephone numbers. Important information that directly concerns recipients of information often follows some relevant information on the legislation related to the decisions adopted. This breaches the principle of presenting important information in the beginning and makes it difficult to perceive information.

All of the above adds complexity to perception and makes information less accessible, namely to persons with cognitive impairments. A simplified language and easy-to-read format must be used to present text information.

User-friendly layout

The content is mostly easy to perceive visually. The text is often written in capital letters, sometimes in a font that it difficult to perceive because of serifs (e.g., Times New Roman). A font with serifs is harder to read as letters tend to merge. It is especially critical to use fonts without serifs for persons with vision impairments. At the same time, the websites meet the contrast requirements and mostly use easy-to-perceive fonts.

Accessibility of certain website elements

Most websites have an option for zooming in without loss of functions, and hyperlinks have sufficient description. An exception is the Chernihiv OMA website, which has no option like this, and the Poltava OMA and the <u>Vinnytsia</u> OMA websites, where this option fails to function properly.

3.1.3. Websites of entities providing humanitarian assistance

- Website eDopomoga (https://edopomoga.gov.ua/)
- Website of the Humanitarian Headquarters of Kyiv (https://potreby.kyivcity.gov.ua/)
- Website SpivDiia (https://spivdiia.org.ua/)

Alternative text for non-text content

Most information on the websites is provided in an accessible text format.

Text readability

Most information is presented in an understandable, simple language. Difficult words such as 'shelter', 'hub', 'offline' are sometimes used, which can make it harder, for example, for older people to understand the information.

Accessibility of certain website elements

All the websites except for eDopomoga allow zooming in without loss of functions.

3.1.4. Websites about temporary accommodation

Website "Prykhystok" (https://prykhystok.gov.ua/)

On this website, it must be noted that the category "persons with disabilities" is not specified in the questionnaire on readiness to give shelter to an IDP in the section dedicated to the categories of persons who can be given shelter. This limits accessibility of information on availability of temporary accommodation for persons with disabilities as the accessibility of such places is critically important for them.

Alternative text for non-text content

All the information on the website is posted in a text format, which makes it accessible.

Text readability

The website is a good example of simple and understandable communication. It sometimes uses abbreviations, like 'LSGV', 'RCMU', 'IDP', that are not explained, but the rest of the information is presented on the website in a simple and understandable language, which makes it accessible.

Multimedia accessibility

There are subtitles or transcripts of video materials, which makes them accessible to persons with different impairments.

Accessibility of certain website elements

The website does not enable zooming in on the text without loss of functions, which makes it less accessible to persons with vision impairments. Available hyperlinks are adequately described.

3.1.5. Website of Ukrzaliznytsia

Website of Ukrzaliznytsia (https://www.uz.gov.ua/)

It must be noted that the website of Ukrzaliznytsia has an easy-to-find section for persons with disabilities. However, the website has little useful information for users with disabilities. For example, the link to the interactive map of the railway station's accessible elements does not function, and there is no information on evacuation trains. The website could not be assessed based on most of the criteria due to a lack of most information.

Accessibility of certain website elements

The website enables zooming in on the text without loss of functions, which meets accessibility requirements.

3.2. Accessibility of Social Media

3.2.1. Telegram channel of the President of Ukraine

Telegram channel of Volodymyr Zelenskyy (https://t.me/V_Zelenskiy_official)

The most important information from the President of Ukraine is presented is videos on his official Telegram channel; the videos are around fifty percent of the content. In particular, the <u>notice of the imposition of martial law</u> was published on 24 February 2022 at 06:42 a.m. as a video address with no subtitles, no sign language interpreting, and no subsequent text in a post³⁶. The only text that could be found in the post was "We are Ukraine!". Such format is completely inaccessible to persons with hearing impairments. At the same time, all citizens should have received on equal terms such information from the President as the leader of the state during the first days of the war.

Since the beginning of the full-scale invasion, no video address of the President has been interpreted into sign language. Several video addresses mostly dedicated to special events had Ukrainian subtitles. Regular video addresses have had no Ukrainian subtitles, and the accompanying text of the posts had only some of the information from the video address. Such a situation makes the content inaccessible to persons with hearing impairments. At the same time, since 25 February 2022, all regular video addresses by the President have also been accompanied by English subtitles, which shows the availability of resource to create subtitles for video materials.

In order to make the channel accessible, information must be interpreted into sign language for important address, and Ukrainian subtitles or accompanying text that duplicates information in the video address should be provided.

3.2.2. Telegram channel of the General Staff of the Armed Forces of Ukraine

Telegram channel of the General Staff of the AFU (https://t.me/GeneralStaffZSU)

Information on the channel is partly provided in an accessible format. Some of the <u>videos</u> <u>with operational information</u> are accompanied by text that duplicates the content of the videos³⁷. However, a lot of <u>video publications</u> with operational information have no accompanying text or subtitles³⁸. This makes operational information inaccessible to the deaf and to persons with hearing impairments.

3.2.3. Telegram channels of the central executive authorities

 Telegram channel of the Ministry of Social Policy of Ukraine (https://t.me/MinSocUA)

The information is mostly provided in a simple and understandable language, and it is easy to perceive visually. Most information is provided in text format, which makes it accessible to persons with vision impairments.

3.2.4. Telegram channels of the heads of the OMA

- Telegram channel of Viacheslav Chaus, the Head of Chernihiv OMA (https://t.me/mykolaivskaODA)
- Telegram channel of Vitalii Kim, the Head of Mykolaiv OMA (https://t.me/mykolaivskaODA)
- Telegram channel of Oleksandr Starukh, the Head of Zaporizhzhia OMA (https://t.me/starukhofficial)

The Telegram channels of the Heads of OMAs mostly meet the accessibility requirements specified in this study's checklist (Annex 3). In other words, the information is clear and easy to perceive visually.

³⁷ Official Telegram channel of the General Staff of the Armed Forces of Ukraine (2022). Operational information. https://t.me/generalstaff_ua/33

³⁸ Official Telegram channel of the General Staff of the Armed Forces of Ukraine (2022). Operational information. https://t.me/GeneralStaffZSU/2304

At the same time, most of the images, mainly information on the <u>rules of conduct</u> (Fig. 4), is provided with no alternative text, except for the channel of <u>Oleksandr Starukh</u> (Fig. 5). This makes it difficult for persons with vision impairments to obtain information.



Fig.4. Publication "What to do after the signal 'Attention all!' is received"

Source: Telegram channel of Vitalii Kim, the Head of Mykolaiv OMA, https://t.me/mykolaivskaODA/135

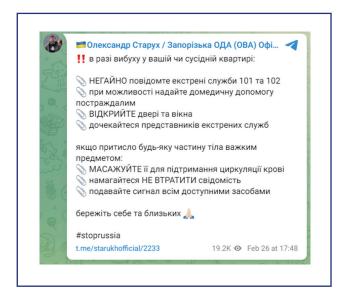


Fig. 5. Publication "If there has been an explosion in your or your neighboring apartment"

Source: Telegram channel of Oleksandr Starukh, the Head of Zaporizhzhia OMA, https://t.me/starukhofficial/2233

Also, none of the video addresses, which are the main content of all three channels analysed, have subtitles; and most video addresses have no alternative text for the information from the video in the posts themselves. The Head of Chernihiv OMA published his video addresses with accompanying text that duplicated the content of his video addresses for a week, from 13 to 20 March³⁹.

³⁹ Official Telegram channel of the Head of Chernihiv OMA, Viacheslav Chaus (2022). https://t.me/chernigivskaODA/469

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The explanation was addressing the poor Internet connection of a large number of users rather than providing accessible content to persons with disabilities. This approach means low awareness of the communication needs of persons with disabilities as the usual video addresses were inaccessible to persons with hearing impairments. However, video addresses with the accompanying text are a good practice that can be used in the future.

At the same time, the Telegram channel of Vitalii Kim, the Head of Mykolaiv OMA, is a good example of accessible information for persons with hearing impairments. Thus, the video addresses during the first two days of the full-scale invasion were interpreted into sign language, except for the very first address with confirmation of martial law in Mykolaiv Oblast^{40,41}. Subsequent video address had partial alternative text⁴². That approach enabled maximum awareness of the situation during the most critical period - at the beginning of the full-scale invasion – and provided main information thereafter.

⁴⁰ Official Telegram channel of the Head of Mykolaiv OMA, Vitalii Kim (2022). https://t.me/mykolaivskaODA/30

⁴¹ Official Facebook page of the Head of Mykolaiv OMA, Vitalii Kim (2022). https://www.facebook.com/VitaliiKimODA/videos/115 4538112013878/

⁴² Official Telegram channel of the Head of Mykolaiv OMA, Vitalii Kim (2022). https://t.me/mykolaivskaODA/161

3.3. Accessibility of Mobile Emergency Alert Applications



Kyiv Digital application

At the time of this study, alerts in the application are not followed by a unique vibration and/or audio signal. They are lost among other notifications of the telephone, which reduces efficiency of the application since the alerts are not very noticeable and can be disregarded.



Air Raid Alert application

The principal function of this Air Raid Alert application, to notify about alerts, is accessible. The content is provided in text format, which makes it accessible to persons with vision impairments. Alerts also contain pictograms and are accompanied by a vibration signal, which differs from classic vibration signals, making it accessible to users with hearing

impairments, just like screens turning on upon receipt of an alert signal. The function of audio alerts also makes the application accessible to persons with vision impairments. It is important to ensure the ability to integrate the application with electronic wristbands, which is important to quickly bring alerts to the attention of users with hearing impairments. Also, alerts must be active until they are mechanically deactivated by the user themself. This will ensure a higher probability of alerting users.

3.4. Accessibility of Information on Information Boards in Social Protection Departments

Three structural subdivisions in social protection and one Administrative service centre (ASC) were assessed during the study for accessibility of information on the following matters:

- procedure for registering internally displaced persons (IDPs);
- receipt of financial assistance by IDPs;
- receipt of compensation for utility charges by those who provide shelter to IDPs;
- receipt of in-kind aid.

The following venues were attended to collect information and take photos of information boards and information products at the notifying entities (Annex 4):

- 1. Social Protection Department, 30/32 Volodymyra Antonovycha Street, Tsentralnyi District, Dnipro
- 2. Shevchenkivskyi Social Protection Department, 11 Lypynskoho Street, Lviv
- 3. ASC, 14a Khvylovoho Street, Lviv
- 4. Social Protection Directorate, 23 Heroiv Nebesnoi Sotni Street, Kramatorsk.

Social Protection Department in Dnipro is the only one out of the four entities studied that provided information on how to obtain an IDP certificate and monetary benefits for IDPs. However, there was no information on payments to those who shelter IDPs or on humanitarian assistance.

As for the reception of citizens, there is a "first in, first out" principle, without any arrangements based on appointment slips, and consultations are given by the department staff. The department also has an information point where a department employee can be asked general questions.

The information products (Annex 4) presented on the information boards mostly have large fonts with important information and information modules highlighted for convenience. At the same time, the information brochure on certificates and benefits for IDPs used many abbreviations without any explanation, namely IDP, RNTPRC, SPD. The fonts used were difficult to perceive and had serifs.

The information was presented in quite a complicated language with references in the very beginning to the legislative norms instead of the most important information for clients.

The information board also had a brochure on obtaining a certificate and benefits for IDPs from the unified portal of state services "Diia", which was mostly consistent with the requirements for accessible information, i.e., had clear and concise language and a perceivable font. However, the brochure did not contain exhaustive information on the documents that must be provided for a certificate to be issued.

Therefore, information is available in the department only in part, due to a lack of written information on compensation to those who offer shelter and in-kind aid. Since such information can only be obtained by communicating with employees of the department, persons with hearing or speech impairments can have difficulty if there are no sign language interpreters in the department. The available written information is partly accessible since it is presented in a complicated language and contains abbreviations.

The Social Protection Directorate in Kramatorsk has no information boards or products like brochures. Information is mostly provided during personal consultations by department staff. Each employee is responsible for different matters that are within the focus of this analysis. Citizens are received by prior arrangement; an appointment slip is issued on site. Persons with disabilities can receive an IDP certificate without having to attend the premises of a structural subdivision with a view to simplifying the process for such persons. However, a person still has to go at a structural subdivision. The employee meets the person at the entrance, takes documents, fills out necessary forms, and brings them to a person to be signed.

Lack of written information in the structural subdivision makes it difficult to obtain information for persons with hearing and speech impairments if there is no sign language interpreter in the department. A separate service for persons with disabilities would not be necessary if the premises were physically accessible and had a single contact to obtain information.

At the **ASC in Lviv**, IDPs can get registered by prior arrangement. According to the summary of information (Fig. 6) on making an appointment with the ASC, this can only be done online. The ASC cannot be visited to obtain an IDP certificate without an appointment. Moreover, the summary of information in written in simple language and gives clear, understandable instructions. However, the font used is difficult to perceive visually because of serifs.

IDPs can also get registered in **Lviv at the social protection department**. The departments give consultations on IDP benefits without prior arrangement online. All issues are discussed in the department through personal communication by prior arrangement via an electronic queue, i.e., by receiving a time slip at the department. A slip is issued via the terminal. There is an information board in the department, but it contains no information on obtaining the status, on benefits to IDPs or those who offer shelter, or on in-kind aid to IDPs.

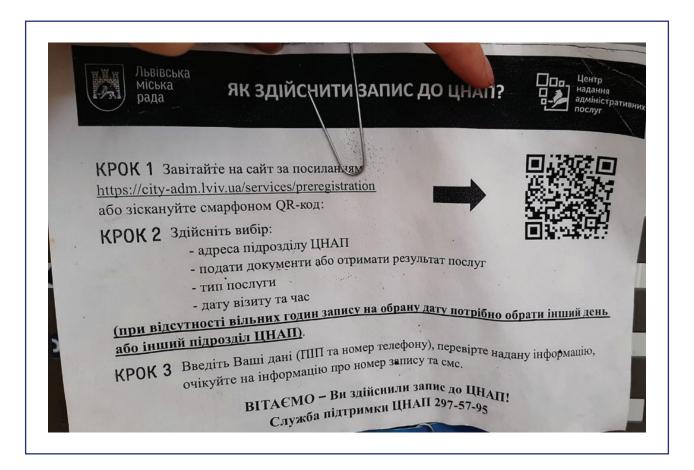


Fig. 6. Checklist "How to make an appointment with the ASC"

Source: Administrative service centre (ASC), 14a Khvylovoho Street, Lviv

Making an appointment with the ASC online only "cuts off" persons who have no smart phones, computers, or Internet access from the service and information. Such persons generally include the most vulnerable categories, namely, the elderly and persons with disabilities. As for the social protection department, lack of written information on the information boards makes it difficult to obtain information for persons with hearing and speech impairments if there is no sign language interpreter in the department.

3.5. Accessibility of Information by Telephone in the Social Protection Structural Subdivisions

In order to assess telephone communication channels as channels of notification during humanitarian response, an observation method was used. Forty-five calls to the social protection structural subdivisions were made in Lviv, Kyiv, Dnipro, and Kramatorsk. Only five out of forty-five calls were successful. In the other forty cases, there was either no answer or the telephone number did not belong to the designated officer or social protection structural subdivision.

The purpose of the calls was to establish the accessibility of the telephone communication channel for persons with disabilities regarding the following matters:

- obtaining an IDP certificate;
- obtaining state benefits, in particular for IDPs with disabilities;
- obtaining compensation for utility charges for those who shelter IDPs;
- obtaining humanitarian assistance.

Unfortunately, in **Kramatorsk** we failed to reach the social protection directorate by any of the telephone numbers. However, the information on the department's website is well organised and contains information cards for every benefit provided by the directorate. Nevertheless, the website has no information on how to make an appointment or submit documents, which limits the accessibility of information.

In **Dnipro**, only the social protection department in Industrialnyi District could be reached by telephone. According to the account, the researcher called to obtain information for her acquaintance with a hearing impairment. During the conversation, the department employee first said that the person had to call personally because there would be additional questions, but then gave a detailed explanation after it had been explained that the call was made upon request of a person with hearing impairment.

Completeness of answers. The employee furnished complete information on the assistance available to IDPs; in particular, she said that the benefits paid to persons with disabilities were UAH 3,000, explained which documents were necessary to issue a certificate to a person with a disability, told about the working schedule, and noted that they had a specialist on duty to receive visitors during a lunch break. Appointments were made with a time slip to be received on site; a consultation would be given, and documents would be made on the same day. It was important to personally come to the department to obtain the documents. As for humanitarian assistance and payments to shelter providers, the employee said that she was not responsible for those matters and gave contact details of several humanitarian assistance centres then answered additional questions. In conclusion, information was provided in full.

Considering the needs of reduced-mobility population groups (RMPG). The needs of RMPG are better considered when notifying about social assistance. According to the employee, the social protection structural subdivision had a device for online communication with a sign language interpreter that could be used to consult clients with hearing impairments. When she was asked about information in a written format, she forwarded the researchers to the website "Social Dnipro", the section of the social policy department. The website does have a section dedicated to internally displaced persons, with a description of the procedure for obtaining a certificate and benefits for IDPs.

In **Lviv**, the researchers managed to communicate with representatives at the social protection department in Halytskyi and Zaliznychnyi Districts.

Completeness of answers. The department employee provided incomplete information. The inspector of the social protection department promptly informed the researchers that, to be registered as an IDP, it is necessary to get registered with the state administration first and then in their department. She gave the addresses but too fast to write them down. As for the documents, she listed a passport, a TIN, and bank details, without specifying additional documents for persons with disabilities. She also provided the addresses of humanitarian assistance centres and referred the researchers to the state administration to obtain payments to those who shelter IDPs.

Considering the needs of RMPG. The needs of RMPG are not considered when notifying about available social assistance. The specialist at the Halytskyi District social protection department said goodbye and hung up as soon as she told about the documents. There was no opportunity to ask questions about the availability of written information online or receiving it by e-mail. It was noted in the Zaliznychnyi District social protection department that there was no sign language interpreter or application to contact an interpreter online. The employee insisted that someone had to accompany the visitor with hearing impairment as it would take too much time to write information down for such a visitor during a consultation. If the person could not find an accompanying person, according to the employee's instruction, he or she must call "the union of the blind (!)".

In **Kyiv**, the researchers managed to reach the social protection department in Solomianskyi District.

Completeness of answers. Quite a complete answer was given by the department employee. They explained what benefits were available to IDPs and what documents had to be submitted. Moreover, it was shared that a personal visit was necessary for documents to be accepted and made, first available at around 8 a.m. to get an appointment slip, which could be for a date in a month; and then, on the scheduled day and time, with the slip and completed documents. As for humanitarian assistance and payments to those whose shelter IDPs, the researchers were forwarded to other authorities.

Considering the needs of RMPG. The needs of RMPG are generally considered. Written information is available on the unified portal of state services, "Diia", with a possibility of receiving a certificate online. As for the reception of persons with hearing impairments, the employee said that a person could come personally, and they would be able to consult and execute documents and benefits in a written format, despite having no sign language interpreters.

Conclusions on Accessibility of Available Notification and Alerting Channels during Crises and Humanitarian Response

Based on the analysis of the above-mentioned channels, eight standard mistakes were noted in the notification of the population during crises and humanitarian response.

- **1.** Providing information, mostly on the rules of conduct during war, as images or infographics without any text that duplicates the content of the images. In this way, information becomes inaccessible to persons with vision impairments who use screen readers.
- 2. Providing information on available shelters (civil protection facilities) in a map format without any text that duplicates content on the maps. In this way, information becomes inaccessible to persons with vision impairments who use screen readers. It is recommended to add lists of shelters in text format to the maps, including information on the accessibility of such shelters to persons with disabilities.

- **3.** Notifying the population via video addresses without sign language interpreting or subtitles in Ukrainian. In such situations, the information is inaccessible to persons with hearing impairments. Since their native language is Ukrainian sign language, it is recommended to interpret videos into sign language instead of subtitles, at least for the most important information.
- **4.** Using complicated language for notification, namely long sentences with more than one idea; complex structures or words and abbreviations; and, legal language without simplification. This presentation of information makes it difficult to understand, especially for persons with intellectual disabilities. Simplified language and easy-to-read format standards must be followed when information is presented in crisis situations.
- **5.** Presenting textual information without important parts highlighted, i.e., as continuous text that is not broken into paragraphs, without bulleted lists, and with large parts of the text in CAPITAL LETTERS. Such presentation makes it difficult to understand the information, especially for the persons who feel stressed or anxious in crisis situations.
- **6.** Providing information only in the format of consultations by representatives at social protection structural subdivisions, with a minimum scope of written information provided in the institutions. Such situations make it difficult to obtain information for persons with vision and speech impairments as personal communication is the only format of information.
- **7.** Digitalising the receipt of information and services without alternative formats, for example, telephone communication or personal visits. This approach leaves out the category of persons who have no smart phones or Internet. Most of such persons are often elderly; the share of those who have different impairments is also high among them.
- **8.** Lacking a means of communication (especially sign language interpreters) with clients with hearing impairments, which makes it difficult for such clients to obtain information on their own and makes them dependent on accompanying persons who can hear.
- **9.** Providing information in fragments; there is often no information on temporary accommodation, evacuation routes, rules of conduct, or availability of protective facilities. The information on social assistance often fails to contain a complete list of documents to be submitted, and does not explain how the necessary documents can be obtained.

SECTION 4.

Implementation of Legislation on Accessibility of Notification in Crisis Situations and during Humanitarian Response

The semi-structured interviews were conducted from 15 - 25 September 2022 in order to:

- identify gaps in the existing practices of the notification and alerting of the population during crises and humanitarian response;
- develop recommendations for enhancing the capacity of public authorities for the accessible notification and alerting of persons with disabilities.

Respondents of the interview conducted to assess the accessibility of information during crises and humanitarian response were seventeen persons who represented central, regional, and local authorities or civil society organisations working with persons with disabilities.

The interview was complicated by the fact that the respondents from the national authorities mostly refused interviews and gave answers in writing, with references to the legislation, which made them less informative. Moreover, representatives at the central level (the Ministry for Reintegration of the Temporarily Occupied Territories [Ministry for Reintegration] and the State Emergency Service [SES]) gave answers to many questions without accounting for the disability aspect and forwarded the researchers to local authorities and SES subdivisions.

At the same time, respondents representing local authorities, civil society organisations, the Government Commissioner for the Rights of Persons with Disabilities, and representatives of the Secretariat of the Ukrainian Parliament Commissioner for Human Rights were more open to participating in the surveys and had more detailed answers to questions during the interview.

As for the respondents' answers to the questions about notification and alerting of persons with disabilities, it seemed that persons with disabilities were not separated at the central level by the Ministry for Reintegration and the SES as a category that needed special attention during notification and alerting during crises and humanitarian response. The respondents did not mention guidelines or instructions on the accessibility of information to persons with disabilities during crises and humanitarian response.

At the same time, on 16 September 2022, Vice Prime Minister Iryna Vereshchuk claimed on air on RADA TV Channel that "all conditions have been created for reduced-mobility population groups during their evacuation from dangerous regions." Thus, the information messages of the Ministry for Reintegration contain telephone numbers on mandatory "evacuation of reduced-mobility population groups" from Donetsk Oblast. Those contacts turned out to be telephone numbers of the Charitable Foundation "Vostok-SOS".

In order to implement the project "Barrier-Free Environment" pursuant to the National Strategy for Creating a Barrier-Free Environment in Ukraine by 2030, the SES is training its staff on the elements of the sign language. Professionals in the SES psychological service were trained first within the framework of cooperation with the Ukrainian Association of Sign Language Interpreters for Persons with Disabilities.

The National Social Service shared that they only acted within the Resolution of the Cabinet of Ministers of Ukraine No. 385. According to that Resolution, the National Social Service and the other public authorities are obliged:

- to determine the organisations, facilities, and institutions on territory without hostilities where children and persons who reside in or are registered with facilities of different types, ownership forms, and subordination for 24/7 stay in the area of active hostilities or close settlements can be temporarily accommodated;
- to ensure the registration of temporarily displaced (evacuated) children and persons who reside in or are registered with facilities of different types, ownership forms, and subordination for 24/7 stay and who have been temporarily displaced outside Ukraine, and their accompanying persons specifying the names of the states and settlements of their destination.

Representatives of local authorities mostly claimed that all the legislative norms had been complied with, and all necessary actions had been taken, although some of them admitted that many of the actions existed on paper only.

According to respondents, notification of the population during crises and humanitarian response was performed via:

- Television;
- Radio:
- Websites of the authorities;
- Viber, WhatsApp, Telegram channels;
- Chat bots in Viber, WhatsApp, Telegram;
- Social media pages, e.g., Facebook;
- Mobile applications;
- Call centres and hotlines;
- Networks of charitable, volunteer, and civil society organisations;
- Budget and communal institutions and organisations.

Alerting and notification are also often performed live by representatives of the public authorities, communal enterprises and organisations, territorial social service centres, civil society and charitable organisations, and volunteers as well as by word of mouth.

Representatives of all national-level authorities surveyed said that the authorities they represented had their own hotlines; the representatives of regional and local authorities also informed about the availability of regional and local hot lines. The Government Commissioner for the Rights of Persons with Disabilities noted that she had established her own hotline to assist persons with disabilities. Some representatives of civil society organisations for persons with disabilities confirmed the efficiency of its operations in that field during the interview.

None of the respondents answered the question about how they used sign language interpreting and subtitles, increased font size and Braille Font in their work during notifying the population during crises and humanitarian response. The representatives from Donetsk OMA referred to the information with the increased font size/Braille Font at railway stations and said that they had seen the reports with sign language interpreting/subtitles on television, and that the persons with hearing and speech impairments called the hotlines with the help of sign language interpreters from the USoD system.

Also, none of the respondents interviewed mentioned simplified language format or had information technology on adherence of Viber, WhatsApp, Telegram channels, chat bots, and mobile applications used by public authorities to the requirements of the DSTU ISO/ IEC 40500:2015 "Information technology. Web Content Accessibility Guidelines W3C (WCAG) 2.0." and DSTU EN 301 549:2022 "Information technology. Requirements for the Accessibility of ICT Products and Services".

Some civil society associations for persons with disabilities (namely, AU SCO "National Assembly of Persons with Disabilities of Ukraine [NAPD]", the Ukrainian Association of the Blind and the Ukrainian Society of the Deaf [with participation of their territorial units in regions and enterprises]) established local communication channels (for members of their organisations) on social media and in messengers, and informed persons with disabilities of emergency situations and coordinated their work to assist these persons during evacuation. NAPD General Secretary Viktoriia Nazarenko, USoD First Deputy Head Tetiana Kryvko, and UAoB First Deputy Head Serhii Kit provided this information.

Almost all respondents noted that they had not believed the war would start; practically none of them were ready for evacuation, although the government had distributed timely general information on the corresponding need, without the disability aspect mentioned.

During their interviews, the respondents listed the following principal channels/services of alerting, for example, of an air raid or artillery attack:

- Alerting system of the SES;
- Public notification system of the SES Cell Broadcast to inform about life threats;
- Television:
- Radio:
- Prompt air raid alerting system by Google;
- Mobile application "Alert";
- Telegram channel "Air Raid Alert";
- Local mobile applications (like Kyiv Digital and others);
- Local Viber, WhatsApp, Telegram channels;
- Announcements on public transport, including the metro (at least in Kyiv);
- Social media;
- Network of charitable, volunteer, and civil society organisations;
- Text messages.

Representatives of local and regional authorities informed that there was often no electricity during the hostilities and near the front line, and neither the alerting system (outdoor siren) nor television, radio, mobile service, or the Internet worked. According to representatives from Donetsk and Luhansk oblast military administrations, as well as civil society organisations, many of the persons with disabilities use push-button telephones so they do not use social media and do not have mobile applications, messengers, or the Internet to get alerts of dangers.

It should be additionally noted that the alerting system (outdoor siren) is practically absent in urban-type settlements and villages. Boarding and rehabilitation facilities, and UAoB and USoD enterprises have no facility alerting systems. At the same time, the Ministry of Social Affairs and the National Social Service noted that, according to paragraph 7.6 of DBN B.2.2-18-2007 "Buildings and structures. Social protection facilities", social protection facilities should be equipped with a fire alarm and evacuation management system of at least Type 3. Respondents also emphasised that, according to Resolution of the Cabinet of Ministers of Ukraine No. 311, care homes for the elderly and for persons with disabilities are communal property of the oblasts and Kyiv. In that regard, respondents held no information on the connection of such care homes to the alerting system.

As for the alerting systems, the UAoB heads and some boarding and rehabilitation facility representatives noted that "the general alerting system (outdoor system) was enough, and even such sirens sometimes shocked persons with disabilities and caused other negative mental effects; so it was no use to additionally introduce a facility alerting system." The heads of UAoB enterprises and organisations informed that "persons with vision impairments who knew how to use a smartphone installed mobile applications that informed of alerts and their cancellation. The problem is alerting persons with vision impairments who are elderly and live alone since they cannot use a smart phone and do not use mobile applications. There are almost no sirens in residential areas, even in Kyiv. In the end, they must keep listening to the marathon on TV or radio."

The USoD heads informed that "at the beginning of the 1990s, USoD enterprises had so-called special boards that were supposed to inform about air raids and other alerts. In the course of time, they ceased to be used as there was no integration in the civil protection system and no funds to upgrade those boards or purchase new equipment. At present, all the alerting matters are within the responsibility of the heads of USoD enterprises, who are supposed to suspend shop operations and take people to the shelter for the duration of an air raid. There are no special means in the USoD system to inform about an air raid alert, like information boards integrated into the local alerting system. Installation of such means requires money. At present, there is no local alerting system that would consider the needs of persons with hearing impairments; no accessible shelters or routes for persons with vision or locomotor impairments."

The USoD heads also commented on the accessibility of mobile applications for air raid alerts. "There are alerts on the telephone screen, but they must include permanent vibration and the possibility of wristband integration. It gives more confidence that a person, including one with hearing impairments, will notice the alert in time. [...] There is an application "Air raid alert". It speaks loudly. It would be great if it also vibrated and kept showing the alert until it was deactivated, the way it was done in SES tests."

Moreover, none of the surveyed said how alerting prescribed by legislation (other than the outdoor siren) was carried out for persons with physical, mental, intellectual, and sensory impairments and other reduced-mobility population groups (and their accompanying persons), which is supposed to be organised by the local executive authorities (local self-government bodies) in accordance with the Resolution of the CMU No. 733. According to paragraph 40 of the Resolution of the CMU No. 841, the evacuation commissions established by the Council of Ministers of the Autonomous Republic of Crimea, local state administrations, and local self-government bodies shall organise alerting, evacuation and the arrival of persons with disabilities and other reduced-mobility population groups, namely, persons with vision, hearing, locomotor, intellectual, and mental impairments, at their place of residence at evacuation assembly points (points to get on vehicles).

Even where there is an alerting system, due to the high speed of missiles and shells in territories of hostilities and in the vicinity of the frontline, people mostly fail to reach shelters and stay in their own accommodations, risking their lives. Representatives of the authorities from one frontline settlement informed that the outdoor siren is on during an air raid alert all the time, which increases the level of notification of the population about a life threat. Of course, the situation in western and central regions differs.

According to representatives of the Sloviansk and Kramatorsk City Council social protection structural subdivisions and local SES bodies, lifts were turned off as of the date of the survey in many apartment blocks in the territories of hostilities and along the frontline, and they are still off in some of them. At the same time, according to explanations furnished by the SES, it is prescribed by legislation that a lift must be turned off during a fire. As a result of such occupation, persons with disabilities who reside in apartment blocks without a lift on the second and higher floors must stay home during an alert and, in the best case, hide considering the rule of two walls or in the bathroom.

A survey conducted by the AU SCO "National Assembly of Persons with Disabilities of Ukraine" from 24 June to 4 July 2022 demonstrated that only 2.5% (33 persons with disabilities out of 1,316 surveyed) of respondents with disabilities went to bomb/other shelters during an air raid alert as they believed that it was the safest option. At the same time, these indicators are higher in territories of hostilities and along the frontline.

Conclusions on Implementing Legislation on Accessibility of Notification during Crises and Humanitarian Response

With due consideration of the above, the principal problems associated with the accessibility of notification and alerting during crises and humanitarian response for persons with disabilities include:

- The existing state of affairs in the field of the notification and alerting of persons with disabilities shows that Article 11 of the UN Convention on the Rights of Persons with Disabilities (following its ratification) has not been implemented. This Article obliges State Parties to take, in accordance with their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies, and the occurrence of natural disasters.
- 2. The effective legislation on the alerting and notification of the population during crises and humanitarian response contains declarative norms about the accessibility of notification and alerting for persons with disabilities, with no detailed information, instructions, or guidelines on implementation. These norms also fail to fully consider the rights and interests of persons with different functional impairments. At the same time, even the existing norms are not fully implemented by public and private entities.
- **3.** On the eighth year of hostilities on Ukraine's territory, the system for alerting and notification of the population during crises and humanitarian response has not been installed in many settlements of the country, or is imperfect in others and fails to ensure the provision of complete information in formats accessible to persons with disabilities.
- 4. There is no clear allocation of authority regarding the alerting and notification of persons with disabilities during crises and humanitarian response. The legislation mostly imposes responsibility upon the "central authorities in the field of civil protection" (except for those in charge of implementing public policy), "local authorities", and "evacuation commissions". At the same time, these entities mostly have no knowledge of how to duly alert persons with disabilities accounting for the peculiarities of their impairments (vision, hearing, speech, intellectual, mental, and other impairments).

- 5. Sign language interpreting, subtitling, simplified language, Braille Font, and increased font size are not always used in the alerting and notification of the population during crises and humanitarian response; whereas, the effective legislation contains no standards for using such formats, except for some guidelines on using Braille Font in information signs specified in DBN 2:2-40:2018 on inclusive buildings and structures.
- **6.** The legislative norms on public authorities and television channels to ensure the alerting and notification of the population about the threat and occurrence of emergency situations, including in a format accessible to persons with hearing and vision impairments, are not sufficiently clear and imperative. The legislation provides for no actions to ensure the accessibility of information and alerts for persons with intellectual impairments.
- 7. The legislation does not provide for liability for failure to consider the rights and interests of persons with disabilities while alerting and notifying the population during crises and humanitarian response. Furthermore, there is no entity that would have the legislative right to monitor, analyse the accessibility of information and alerts, and impose liability for violating prescribed norms.

Recommendations on Improving Accessibility of Notification during Crises and Humanitarian Response

- 1. Develop and approve the Governmental Action Plan for Eliminating the Legislative Gaps in the Notification and Alerting of the Population during Crises and Humanitarian Response, and establish an adequate system for the proper notification and alerting of the population adapted to the needs of persons with vision, hearing, intellectual, and mental impairments. Ensure the active participation of persons with disabilities, namely those with mobility, sensory, intellectual, and mental impairments, in developing the Plan. The Plan shall include, without limitation, the following tasks:
 - a. To include provisions on ensuring the accessible notification and alerting of the population during crises and humanitarian response into specialised legislation on the entities responsible for such alerting and notification. In particular, such provisions should be included into the Laws of Ukraine "On Civil Service", "On the Cabinet of Ministers of Ukraine", "On Central Executive Authorities", "On Local State Administrations", "On Local Self-Government in Ukraine", "On Television and Radio Broadcasting", "On the National Council of Television and Radio Broadcasting of Ukraine", "On Electronic Communications" and other laws (if necessary), as well as corresponding subordinate legislation.
 - b. To determine and designate at the legislative level the entity (the proposed entity is the SES) that would be obliged to monitor and analyse the accessibility of the alerting and notification of the population in crisis situations for persons with vision, hearing, mobility, intellectual, mental impairments; and would have the right to initiate imposing liability upon offenders. To delegate to such entity the functions of expert examination of information products and notices in crisis situations in an accessible format, in particular, for use thereof by public authorities who are directly responsible for the notification of the population. To delegate revision of digital notification and alerting products to the Ministry of Digital Transformation. To engage persons with disabilities and representatives of associations of persons with disabilities in such expert reviews.

- c. To expand the norms of civil protection legislation in terms of the alerting and notification of the population of the threat and occurrence of emergency situations in accessible formats, including with the requirement for creating respective notices in a simplified language and easy-to-read format so that respective information in the alerts and notices of emergency situations would be accessible to persons with intellectual impairments on equal terms with others; and to establish a procedure for bringing it to the attention of these persons.
- d. To oblige the State Committee for Television and Radio Broadcasting to monitor the information content of websites of not only ministries, other central executive authorities, and regional state administrations, but also of local state administrations, local self-government bodies, and other budget institutions⁴³. The recommendation on publishing information on the activities of the executive authorities by such entities in a format accessible to persons with sensory impairments is provided for by Resolution No. 730⁴⁴.
 To bring the procedure for operating the websites of executive authorities⁴⁵
 - To bring the procedure for operating the websites of executive authorities⁴⁵ in line with the procedure for publishing online information on the activities of executive authorities, in terms of the accessibility of websites (web portals) for users with disabilities⁴⁶.
- e. To oblige public authorities and television channels to make contracts with natural and legal persons who provide sign language interpreting services; to ensure that such public authorities and television channels will adapt the notification and alerting of the population during Crises and Humanitarian Response to the needs of persons with hearing impairments.
- f. To regulate the operation of hotlines for public authorities so that they would have a video call function with the participation of a sign language interpreter, with whom a public authority enters into a sign language interpreting service contract. Information on the telephone number (with the video call function) that can be used by citizens with hearing and speech impairments to reach a public authority's hotline shall be posted under the general number of such hotline, with the note "for citizens with hearing and speech impairments".

⁴³ Order of the State Committee for Television and Radio Broadcasting No. 118 "On Approving the Procedure for Monitoring of the Information Content of Official Websites of the Executive Authorities by the State Committee for Television and Radio Broadcasting" (2015). https://zakon.rada.gov.ua/laws/show/z0759-15#Text

Resolution of the Cabinet of Ministers of Ukraine No. 730 "On Amending Resolutions of the Cabinet of Ministers of Ukraine No. 3 of 4 January 2002 and No. 1302 of 29 August 2002" (2013). https://zakon.rada.gov.ua/laws/show/730-2013-%D0%BF

⁴⁵ Order of the State Committee for Information Policy, Television and Radio Broadcasting of Ukraine, the State Committee for Communications and Informatisation of Ukraine No. 327/225 "On Approving the Procedure for Information Content and Maintenance of the Unified Web portal of Executive Authorities, and the Procedure for Operation of Websites of Executive Authorities" (2002. https://zakon.rada.gov.ua/laws/show/z1021-02#Text

⁴⁶ Resolution of the Cabinet of Ministers of Ukraine No. 3 "On the Procedure for Publishing Information on Operations of the Executive Authorities on the Internet" (2002). https://zakon.rada.gov.ua/laws/show/3-2002-%D0%BF#Text

- **g.** To develop and approve national standards (where available, to render the respective international standard effective) for using:
 - Simplified language and easy-to-read format during the notification and alerting of the population during Crises and Humanitarian Response. There is a document in international practice that contains the standards for making information easy to read and understand. It has been translated into Ukrainian and can be the basis for the proposed standard.
 - Sign language during the notification and alerting of the population during Crises and Humanitarian Response, taking into account the needs of persons with hearing impairments. In particular, the standard has to contain norms on the size of the interpreter's block on the screen, his or her location on the screen, colour of clothes, illumination, and other aspects.
 - Subtitles during the notification and alerting of the population during Crises and Humanitarian Response, accounting for the needs of persons with hearing impairments. In particular, the standard must contain norms on the size and colour of the font, location of subtitles on the screen, etc.
 - Braille Font, increased font size at physical surrounding objects, and audio description on television during the notification and alerting of the population during Crises and Humanitarian Response, taking into account needs of the persons with vision impairments.
- 2. To ensure development of a system for the alerting and notification of the population during Crises and Humanitarian Response, which would consider, without limitation, users of push-button telephones and wristbands with vibration signals (connected to a smart phone), in each settlement; and to allocate respective funds from the state budget for that purpose.
- **3.** To accelerate the introduction of an emergency aid system at the single telephone number '112'.

ANNEX 1. Study Methodology (Short Version)

Purpose: to analyse the existing practices for the notification and alerting of the population during Crises and Humanitarian Response in terms of their accessibility to persons with disabilitie.

Tasks:

- To determine the communication needs of persons with disabilities during Crises and Humanitarian Response.
- To analyse the Ukrainian legislation on the notification and alerting of the population to establish how matters of accessibility for persons with disabilities are considered.
- To analyse the existing national and regional channels and formats for notifying and alerting the population during Crises and Humanitarian Response in terms of their accessibility to persons with disabilities.
- To identify gaps in existing practices for notifying and alerting the population during Crises and Humanitarian Response, taking into account the communication needs of persons with disabilities and the requirements for accessible information.
- To develop recommendations on enhancing the capacity of public authorities for the accessible notification and alerting of persons with disabilities during Crises and Humanitarian Response.

Study method

A combination of methods was used in the study, namely:

 A desk review was conducted to analyse existing Ukrainian legislation on the notification and alerting of the population to establish how matters of accessibility for persons with disabilities are considered. 2. Checklists were used to analyse the existing national and regional channels and formats for notifying and alerting the population during Crises and Humanitarian Response in terms of their accessibility for persons with disabilities. First, the checklists were used to determine the use of different formats of information, which is a basis for the accessibility of information for persons with disabilities.

In order to meet the study objectives, in addition to the national notification and alerting channels, the notification and alerting channels in ten regions of Ukraine were analysed:

- Kyiv and Kyiv Oblast;
- Donetsk Oblast;
- Mykolaiv Oblast;
- Kharkiv Oblast;
- Chernihiv Oblast:
- Zaporizhzhia Oblast;
- Sumy Oblast;
- Poltava Oblast;
- Dnipropetrovsk Oblast;
- Vinnytsia Oblast.

These regions were selected as some of them have been the most affected since the beginning of the full-scale invasion of Ukraine on 24 February 2022; the intensity of air raid alerts, notifications of evacuation, humanitarian assistance, and other matters were supposed to be the highest in those regions. Also, Dnipropetrovsk, Poltava, Vinnytsia, and Zaporizhzhia Oblasts were among the regions that hosted the largest number of internally displaced persons, and it is important to assess the accessibility of information on humanitarian and state financial assistance there.

2.1. Criteria to assess the accessibility of notification and alerting

The checklists considered the following criteria to assess the accessibility of notification and alerting:

- availability of different notification formats that ensure access to information for persons with different functional impairments (cognitive, mobility, hearing, vision, and speech);
- conformity of web resources to the basic requirements of DSTU ISO/IEC 40500:2015 "Information technology. Web Content Accessibility Guidelines W3C (WCAG) 2.0.".

2.1.1. Notification formats accessible to persons with different functional impairments

Hearing Impairments	Vision Impairments	Cognitive and Speech Impairments
Sign languageWritten informationSimple languageLight notificationsPictures, pictograms	 Increased font size Contrasting colours Sound notifications / verbal communication Touch (vibration) 	Increased font sizeSimple languagePictures, pictogramsSign language

2.1.2. Basic web accessibility requirements⁴⁷

- Alternative text for non-text content
- Contrast between text and background at least 4.5:1
- Text that can be enlarged without losing quality
- Text content that is easy to understand.
- **2.2. The proposed channels to be analysed** included twenty regional websites, namely those of the OMA, raion military administrations, and city heads; and thirteen national information channels, namely websites, social media, and applications.
- **3. Observation** was used to assess the social protection structural subdivisions in terms of the accessibility of notification of the population about possible social assistance, namely for internally displaced persons. The observation included photographing information boards; assessment of telephone channels for notifying the population in terms of the availability of information; and, assessment of different notification formats that would be accessible to persons with different functional impairments.

The observation was performed in four social protection structural subdivisions in the cities of Kyiv, Dnipro, and Lviv, and in Donetsk Oblast.

- **4. Focus group interviews with persons with disabilities** were conducted to establish the communication needs of such persons and to identify gaps in the existing practices of notifying and alerting the population during Crises and Humanitarian Response.
 - **4.1. Participants of focus group interviews.** The interviews were conducted online to cover persons who have different war experiences, including displacement, so they could be in different geographic locations.

⁴⁷ DSTU ISO/IEC 40500:2015 "Information technology. Web Content Accessibility Guidelines W3C (WCAG) 2.0". https://www.w3.org/TR/WCAG20/

Each focus group interview had to include at least five participants with certain functional impairments or the legal representatives or carers of such persons:

- persons with cognitive impairments;
- persons with intellectual impairments;
- persons with vision impairments (complete or partial blindness);
- persons with hearing impairments (complete or partial deafness);
- persons with mobility impairments.

Five focus group interviews were conducted during the study.

- **4.2. The selection criteria** for persons with disabilities and/or their legal representatives or carers were as follow:
- a disability associated with hearing, vision, speech, mobility, or cognitive impairments;
- on the territory of Ukraine as of the beginning of martial law on 24 February 2022:
- experienced an air raid or other alert, notification of humanitarian assistance, evacuation, etc.
- **5. Individual semi-structured interviews** were conducted to identify gaps in the existing practices of the notification and alerting of the population during Crises and Humanitarian Response, and to develop recommendations on enhancing the capacity of public authorities to conduct the accessible notification and alerting of persons with disabilities.
 - **5.1. Selection criteria** for representatives of public authorities and other abovementioned entities, enterprises, institutions, and organisations are as follows:
 - work experience associated with developing and implementing public policy in the field of rights for persons with disabilities; notification and alerting of the population of crisis situations and of humanitarian law; creation, operation, and use of channels for corresponding notification and alerting, etc.;
 - activity covering the period of martial law in Ukraine, which started on 24 February 2022;
 - activity covering the region(s) specified within the framework of the study.

ANNEX 2. List of Legal and Normative Acts Analysed

- 1. Civil Protection Code of Ukraine
- 2. Law of Ukraine No. 2657-XII of 10 February 1992 "On Information"
- 3. Law of Ukraine "On Ensuring of Rights and Freedoms of Internally Displaced Persons"
- 4. Law of Ukraine "On Legal Regime of Emergency"
- 5. Law of Ukraine "On Legal Regime of Martial Law"
- **6.** Decree of the President No. 64 of 24 February 2022 "On the Imposition of Martial Law in Ukraine"
- **7.** Decree of the President of Ukraine No. 93 of 2 March 2022 "On Coordination of Activities to Settle Humanitarian and Social Affairs"
- **8.** Resolution of the Cabinet of Ministers of Ukraine No. 733 of 27 September 2017 "On Approving the Regulation on the Organisation of Notification of the Threat or Occurrence of Emergencies and the Organisation of Communications in the Field of Civil Protection"
- 9. Resolution of the Cabinet of Ministers of Ukraine No. 841 of 30 October 2013 "On Approving the Procedure for Evacuation in Case of the Threat or Occurrence of Emergencies"
- **10.** Resolution of the Cabinet of Ministers of Ukraine No. 385 of 27 March 2022 "Certain Matters of Temporary Displacement (Evacuation) of the Children and Persons Residing in or Registered with Facilities of Different Types, Ownership Forms and Subordination for 24/7 Care, during the Martial Law"
- **11.** Resolution of the Cabinet of Ministers of Ukraine No. 282 of 18 April 2018 "On Approving the Procedure for Detecting Persons with Disabilities and Other Reduced-Mobility Population Groups Residing in the Area of Emergency or Possible Destruction, and for Organising Their Accompaniment"

- **12.** Resolution of the Cabinet of Ministers of Ukraine No. 854 of 29 July 2022 "On Establishing the Coordination Headquarters to Prepare Mandatory Evacuation of the Population from Donetsk Oblast during the Martial Law"
- **13.** Ordinance of the Cabinet of Ministers of Ukraine No. 1742-p of 28 December 2021 "On Approving the Civil Protection Basic Action Plan 2022"
- **14.** Ordinance of the Cabinet of Ministers of Ukraine No. 43-p of 31 January 2018 "On Approving the Concept of Development and Technical Upgrade of the System for Centralised Alerting of the Threat or Occurrence of Emergency"
- **15.** Ordinance of the Cabinet of Ministers of Ukraine No. 179-p of 24 February 2022 "On the Organisation of Functioning of the Unified State Civil Protection System during Martial Law"
- **16.** Ordinance of the Cabinet of Ministers of Ukraine No. 679-p of 2 August 2022 "On Mandatory Evacuation of the Population from Donetsk Oblast"
- 17. Ordinance of the Cabinet of Ministers of Ukraine No. 488-p of 11 July 2018 "On Approving the Action Plan for Implementing the Concept of Development and Technical Upgrade of the System for Centralised Alerting of the Threat or Occurrence of Emergency"
- **18.** Order of the MIA of Ukraine No. 884 of 5 November 2018 "On Approving the Technical Requirements for the National Automated Central Alerting System";
- **19.** Order of the MIA of Ukraine No. 579 of 10 July 2017 "On Approving the Guidelines on Planning Evacuation Activities"
- **20.** DSTU ISO/IEC 40500:2015 "Information technology. Web Content Accessibility Guidelines W3C (WCAG) 2.0."

ANNEX 3.

Detailed Report on the Accessibility of Digital Notification and Alerting Channels in Crisis Situations

LIST OF CHANNELS ANALYSED

Central exec	cutive authorities	83
	e of the Ministry for Reintegration of the Temporarily Occupied	83
b. Website	e of the Ministry of Social Policy of Ukraine	85
c. Telegrar	m channel of the Ministry of Social Policy of Ukraine	85
d. Website	e of the State Emergency Service of Ukraine (SES)	86
Local execut	tive authorities	88
a. Website	es of the oblast military administrations (OMA)	88
Kyiv C	AMC	88
Done	etsk OMA	90
Myko	olaiv OMA	91
Khark	kiv OMA	92
Cherr	nihiv OMA	93
 Zapor 	rizhzhia OMA	93
Sumy	/ OMA	96
 Poltav 	va OMA	97
Dnipr	ropetrovsk OMA	99
Vinny	rtsia OMA	100
b. Website	es of the raion military administrations (RMA)	101
Kryvy	/i Rih RMA	101
 Bucha 	a RMA	102
 Myrho 	orod RMA	103
c. Website	es of the local councils	104
Krama	atorsk City Council	104
Khark	kiv City Council	105

d.	. Telegram channels of the Heads of oblast military administrations (OMA)	106
	• Telegram channel of Viacheslav Chaus, the Head of Chernihiv OMA	106
	Telegram channel of Vitalii Kim, the Head of Mykolaiv OMA	107
	Telegram channel of Oleksandr Starukh. the Head of Zaporizhzhia OMA	108
Enti	ties providing humanitarian assistance	109
a.	Facebook page of Red Cross Zakarpattia	109
b.	eDopomoga	109
c.	Humanitarian Headquarters of Kyiv	.110
d.	SpivDiia	. 111
Enti	ties informing about temporary accommodation	112
a.	Prykhystok	.112
Noti	fication channels of Ukrzaliznytsia JSC	113
	Website of Ukrzaliznytsia	
	Telegram channel of Ukrzaliznytsia	
Oth	er digital channels	114
a.	Telegram channel of the President of Ukraine	. 114
	Website of the General Staff of the Armed Forces of Ukraine	
Mob	oile emergency alert applications	115
	Kyiv Digital application	
	• Air Raid Alert application	

CHECKLIST USED TO ASSESS NOTIFICATION CHANNELS

The statements in this checklist are associated with the accessibility of information. If the information does not conform to the statements, this means that the information is inaccessible or less accessible. Some of the statements were not used to assess certain channels when the channels had no information to be assessed, for instance, hyperlinks or images.

- **1.** Alternative text for non-text content.
 - The images contain alternative text, or there is text material that duplicates the visual.
 - There is no text inside the images.

2. Text content is easy to understand:

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of complex ones. Sophisticated words are explained several times if their use is critical.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.
- The correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XX) formats are used.

3. Text content is easy to perceive visually:

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The type of font is easy to read. It has no serifs, decorative elements, shadows or italic letters; and the letters are of the same thickness and height.
 For example, Arial (except for Arial Narrow), Proxima Nova, Futura, Tahoma, or Calibri.

4. Multimedia accessible for perception:

- There are subtitles of any video materials published on the resource.
- Videos without subtitles have transcripts on the same page with the video or a link to a document with the transcripts.
- There is no content flickering more than three times a second.

5. Accessibility of certain website elements:

- Text can be enlarged without losing quality.
- Hyperlinks are adequately described.

FINDINGS OF THE DIGITAL CHANNEL ASSESSMENT

Central executive authorities

A. WEBSITE OF THE MINISTRY FOR REINTEGRATION OF THE TEMPORARILY OCCUPIED TERRITORIES

Evacuation routes, temporary shelters

Alternative text for non-text content

- The images contain no alternative text, or there is no text material that duplicates the visual one.
- There is text inside the images.

The main page contains banners with important information on a crisis hotline for the National Information Bureau. The images on the banners contain no alternative text. When the banners are clicked, incomplete text information is shown. For example, the text format has no telephone numbers in a long format.



There are evacuation infographics without alternative text.

Text readability

- One sentence, one idea.
- The sentences have no more than 15 words.
- Abbreviations like 'TOT' are used without explanation.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.
- Correct phone number (OXX XXX XXX XX) formats are used.

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

There is information on how to obtain an IDP certificate, corresponding benefits, humanitarian assistance, etc.

Alternative text for non-text content

The images contain alternative text, or there is text material that duplicates the visual one. Information on <u>obtaining the status of an IDP</u> and other matters is presented as guidelines that can be downloaded as PDF files and are accessible to screen readers. Some information is presented as <u>infographics on obtaining IDP status</u> and other matters. The infographics have no alternative text. At the same time, the website has other materials that provide information in text format.

Text readability

- One sentence, one idea.
- One sentence sometimes has more than 15 words.
- Abbreviations are either avoided or spelled out at first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

The infographics also contain pictograms, which make it easier to perceive information.

User-friendly layout

 Contrast between text and background is at least 4.5:1. However, some elements of the infographics have insufficient contrast. The text is placed against a background with patterns.

ХТО МОЖЕ ЗВЕРНУТИСЯ?

Громадяни_ки України, які перемістилися з Волинської, Дніпропетровської, Донецької, Житомирської, Запорізької, Київської, Луганської, Миколаївської, Одеської, Сумської, Харківської, Херсонської, Чернігівської областей та міста Києва.

- Text is left-aligned.
- Only hyperlinks are underlined.
- In most titles, all the words are written in CAPITAL LETTERS.
- The font size is at least 12 pt.
- The font is legible.

B. WEBSITE OF THE MINISTRY OF SOCIAL POLICY OF UKRAINE

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

There is no information on how to obtain humanitarian assistance or benefits for internally displaced persons.

Alternative text for non-text content

 The images contain no alternative text, and there is no text material that duplicates the visual one. The humanitarian assistance section contains a scanned PDF file without accompanying text.

Text content is easy to understand

Complex linguistic structures are used instead of understandable ones. The official letter on humanitarian assistance is written in sophisticated legal language. The section for persons with disabilities and IDPs contains a description of legislation on assistance to such persons and contains no information in a simple language on the mechanisms for obtaining such assistance, etc.

C. TELEGRAM CHANNEL OF THE MINISTRY OF SOCIAL POLICY OF UKRAINE

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Text readability

- One sentence, one idea.
- The sentences have more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.

D. WEBSITE OF THE STATE EMERGENCY SERVICE OF UKRAINE (SES)

There is an option for communicating in sign language.

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Rules of conduct

Alternative text for non-text content

The images contain no alternative text, and there is no text material that duplicates the visual one. Some of the information on the <u>rules</u> of conduct during the war is provided in text format accessible to persons with vision impairments. The remaining information is posted as images without alternative text.

Text readability

The text part of the information lacks visualisation, e.g., pictures showing items to be put into an "emergency bag". Although the text contains lots of bulleted lists and paragraphs are separated, most information is presented as continuous text, which is difficult to perceive. Texts like this must be perceived quickly and easily in a situation when a person is anxious.

- One sentence, one idea.
- The sentences sometimes have more than 15 words.
- The abbreviations ES, FM, BM, MIA are used without any explanations.
- Sophisticated expressions, like 'of man-made nature', are sometimes used. Sophisticated words are sometimes explained, e.g., "civil protection facilities (shelters)".
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Overuse of CAPITAL LETTERS is avoided.

User-friendly layout

- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

Text can be enlarged without losing quality.

Information provided as images

There are pictograms and pictures in addition to some information.





Alternative text for non-text content

- Images contain no alternative text, and there is no text material that duplicates the visual one.
- Text is placed inside images (gradient background).

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations like 'BBU' are sometimes used without explanation.
- Simple words are used instead of sophisticated ones. Pictograms are used to enhance the perception of information.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

- Contrast between text and background is sometimes less than 4.5:1.
- Text is mostly left-aligned.
- Only hyperlinks are underlined.
- Lots of text is written in CAPITAL LETTERS.
- The font size is at least 12 pt.
- The font is legible.

Local executive authorities

Websites of the oblast military administrations (OMA)

Kyiv OMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

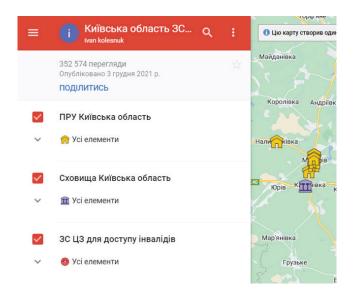
N/A

Availability of protective facilities

There is a map of shelters in Kyiv Oblast

Alternative text for non-text content

Images contain no alternative text, and there is no text material that duplicates the visual one. Shelter coordinates are only provided as an interactive map with no alternative text. The map has a section with shelters accessible to persons with disabilities.



Text readability

- The abbreviations CPF and RS are used without any explanations.
- Bulleted lists are used.

Inadequate terms are used, e.g., "SPF for disabled persons".

User-friendly layout

- The font is legible.
- The font size is at least 12 pt, but the text of the map can be enlarged.
- Hyperlinks are adequately described.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

There is information on assistance to persons with disabilities in a separate section on the website. Navigation is simple.

Гуманітарна політика Пільги та субсидії Державні допомоги Державна допомога осіб з інвалідністю та людей похилого віку Допомога внутрішньо перміщеним особам Учасникам АТО/ООС

Information on benefits paid to IDPs

Text readability

Excessively long sentences of 100 to 130 words are used. The sentences contain more than one idea.

За рішенням комісій із питань призначення (відновлення) соціальних виплат внутрішньо переміщеним особам, утворених районними, районними в мм. Київ та Севастополь держадміністраціями, виконавчими органами міських, районних у містах (у разі утворення) рад, грошова допомога може надаватися внутрішньо переміщеним особам з інвалідністю, їх дітям, дітям з інвалідністю та особам, що здійснюють за ними догляд, які перемістилися з населених пунктів Донецької та Луганської областей, на території яких органи державної влади здійснюють свої повноваження в повному обсязі, і не мають можливості повернутися до попереднього місця проживання, в тому числі через потребу в тривалій вторинній (спеціалізованій) медичній допомозі або третинній (високоспеціалізованій) медичній допомозі з цілодобовим спостереженням або в зв'язку з загрозою насильства чи психологічною травмою.

- All the items are mentioned in one sentence instead of bulleted lists.
- Abbreviations are not used.
- Complex linguistic structures, like 'activities to ensure national security and defence, supress and deter the armed aggression of the Russian Federation', are sometimes used.
- Many of the documents listed to obtain IDP status are not explained, and no examples or tips are given regarding resources where such examples or templates can be found.

User-friendly layout

- Contrast between text and background is more than 4.5:1.
- Text is not left-aligned; it is justified.
- Only hyperlinks should be underlined. Underlined text is used in the material on assistance to persons with disabilities.
- In the title of the material, all the words are written in CAPITAL LETTERS
- The font size is at least 12 pt.
- The font is legible, but the material on assistance to persons with disabilities is written in a font that is hard to perceive (Times New Roman).

Accessibility of certain website elements

- Text can be enlarged without losing quality.
- Hyperlinks are adequately described.

Rules of conduct

N/A

Donetsk OMA

Alerts, operational information on hazards

The latest operational information is dated 23 February 2022.

The title of the section uses the abbreviation 'JFO', which is not explained anywhere.

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

There is a map of shelters in Donetsk Oblast.

The map contains no information on accessibility of shelters to persons with disabilities.

Alternative text for non-text content

The images contain no alternative text, and there is no text material that duplicates the visual one. Shelter coordinates are only provided as an interactive map, with no alternative text; but the names of the shelters are provided as addresses that are accessible with screen readers.

Text readability

- Abbreviations are not used.
- Bulleted lists are used.

User-friendly layout

- The font is legible.
- The font size is less than 12 pt, but the text of the map can be enlarged.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

N/A

Text readability • The text is placed inside the image.



Rules of conduct

N/A

Mykolaiv OMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

The website menu contains no information on humanitarian or social assistance, including benefits available to IDPs. Some information can be found in the dynamic newsfeed, but it is difficult to find since the website posts about twenty news items a day. For example, information on access to medicines is presented as news.

Alternative text for non-text content

The image contains no alternative text, and there is no text material that duplicates the visual one. For example, the information on access to medicines is given as an image with no alternative text.

Kharkiv OMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Alternative text for non-text content

The link takes users to reports on assistance provided. There is no information on how to obtain assistance.







Alternative text for non-text content

The image contains no alternative text, and there is no text material that duplicates the visual one. The telephone number of the humanitarian assistance contact centre "Package to Everyone" is given as an image. There is no alternative text. The banner "Humanitarian assistance to communities in Kharkiy Oblast" has no alternative text.

Availability of protective facilities

N/A

Chernihiv OMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

N/A

There is a button "For persons with vision impairments", but it is inactive.



Не призначено головна сторінка !!!

Zaporizhzhia OMA

Alerts, operational information on hazards

<u>The information on hazards</u> is presented as news articles together with other news items. It is presented in text format.

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

Alternative text for non-text content

The image contains text material that duplicates the visual one. There are <u>lists of protective facilities</u> for each district of Zaporizhzhia as a PDF file.

Text readability

- Abbreviations are either avoided or spelled out in the first use.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- All the words in titles are sometimes written in CAPITAL LETTERS.
- The font size is less than 12 pt.
- The font type used in the lists, Times New Roman, is hard to perceive.

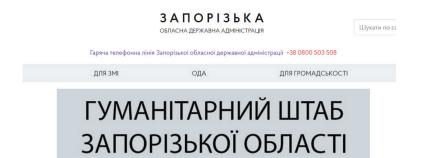
Accessibility of certain website elements

- Text can be enlarged without losing quality.
- Hyperlinks are adequately described. There is also information on the size and type of the file, but it is beyond the hyperlinked text.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Alternative text for non-text content

The image has alternative text. The main page of the website has a visible banner "Humanitarian Headquarters of Zaporizhzhia Oblast". The banner image has alternative text.



Text readability

- One sentence, one idea.
- The sentences are short and have no more than 15 to 20 words.
- Abbreviations, such as TES and ES, are sometimes used without any explanations.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are not always used instead of mentioning all the items in one sentence.
- Correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XX) formats are not always used.
 - Центр допомоги «Ми разом» Василівського району:

Адреса - м.Запоріжжя, вул.Гоголя, 60, у приміщенні КЗ «Запорізький академічний обласний театр ляльок» ЗОР.

Графік роботи - з 09.00 до 11.00 години

Контактний номер телефону - 0933056369

User-friendly layout

- Contrast between text and background is more than 4.5:1. However, the text of the active buttons in the version for persons with vision impairments is black against a dark blue and red background, which is inconsistent with the contrast standard.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Many of the titles, including the text of the banner, are written in CAPITAL LETTERS.
- The font size is less than 12 pt.
- The font is legible.

Additionally for the websites

- Text can be enlarged without losing quality.
- Hyperlinks are adequately described.

Rules of conduct

Alternative text for non-text content

The image contains no alternative text. The information is provided as thirteen images with checklists on the rules of conduct in different emergency situations. There is no alternative text for the images. The checklists can only be downloaded as JPG files.

Text readability

- One sentence, one idea.
- One sentence has no more than 15–20 words.
- Abbreviations, such as ES and NPP, are used without explanation.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

The information in the checklists is presented as continuous text without any intervals between paragraphs or separated modules, which makes it difficult to read.

User-friendly layout

- Contrast between text and background is at least 4.5:1 for the principal text, but it is different for titles in the colour red.
- Text is justified.
- <u>Underlined</u> text is used not only for hyperlinks, but also to highlight text.
- Many of the titles are written in CAPITAL LETTERS.
- The font size is at least 12 pt.
- The font is legible.

Sumy OMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

No information is available, except for contact details for the social protection department.

Rules of conduct

N/A

Poltava OMA

Alerts, operational information on hazards

There is no operational information. It must be searched for in the dynamic newsfeed on the Facebook page.

Evacuation routes, temporary shelters

There is no information. It must be searched for in the dynamic newsfeed on the Facebook page.

Availability of protective facilities

There is no information. It must be searched for in the dynamic newsfeed on the Facebook page.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

There is no information. It must be searched for in the dynamic newsfeed on the Facebook page.

Alternative text for non-text content

The image contains no alternative text. The checklists and guides contain information in the format of images with no alternative text.

- запас їжі на кілька днів (чорний шоколад (з горіхами), жменю льодяників, м'ясні та рибні консерви тощо);
- запас питної води на 2 дні;



Rules of conduct

Брошури

Абетка безпеки (Дії населення при небезпечних подіях та надзвичайних ситуаціях. ДОВІДНИК)

Найпростіші укриття (заняття)

ДОКУМЕНТИ, ЯКІ ПІДТВЕРДЖУЮТЬ СПЕЦІАЛЬНІ СТАТУСИ ІНОЗЕМЦІВ ТА ОСІБ БЕЗ ГРОМАДЯНСТВА В УКРАЇНІ

Text readability

- One sentence, one idea.
- One sentence has no more than 15–20 words.
- Abbreviations, such as ES, are sometimes used without explanation.
- Simple words are mostly used instead of sophisticated ones.
- Bulleted lists are mostly used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is centre-aligned or justified. Text is rarely left-aligned.
- Underlined text is sometimes used to highlight information.
- Many of the titles are written in CAPITAL LETTERS.
- The font size is at least 12 pt.
- The font type, Times New Roman, is hard to read.

Additionally for the websites

The text can be enlarged, but it is shown incorrectly when the font is increased to the maximum.

Пам'ятки

Ρο3мір Δ2. Δ3

Попялок лій піл час виникнення небезпек приролного характеру
Попялок лій піл час виникнення небезпек техногенного характеру
Евакуація
Небезпечні роспини
Небезпека чалного газу
Обережно, вибухонебезпечні предмети!
Пожежна безпека у побуті
Пожежі в екосистемах

Hyperlinks are adequately described.

Dnipropetrovsk OMA

Alerts, operational information on hazards

N/A.

Evacuation routes, temporary shelters

N/A.

Availability of protective facilities

N/A.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

<u>Information on assistance for internally displaced persons</u> is on the main menu and is easy to find.

Text readability

- One sentence, one idea.
- Some sentences have not more than 15 words.
- The abbreviation 'IDP' is used without explanation.
- Simple words are used instead of sophisticated ones.
- Using bulleted lists instead of mentioning all the items in one sentence with no list at all.
- Many of the documents listed to obtain an IDP status are not explained, and no examples or tips are given regarding resources where such examples or templates can be found.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Additionally for the websites

- Text can be enlarged without losing quality.
- Hyperlinks are adequately described.

Rules of conduct

N/A.

Vinnytsia OMA

Alerts, operational information on hazards

N/A.

Evacuation routes, temporary shelters

N/A.

Availability of protective facilities

N/A.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

<u>Information on assistance for IDPs</u> is on the main menu and is easy to find. There is no detailed information on different amounts of benefits subject to the categories of persons, e.g., persons with disabilities or pensioners. There is also no information on the documents necessary for obtaining IDP status. There are only the address and telephone numbers of the designated authorities and persons.

Alternative text for non-text content

The image contains no alternative text. The information is posted as images only. There is no alternative text or possibility to download information in an accessible format.

Text readability

- The abbreviation 'SWD' is used without explanation.
- Correct phone number (0XX XXX XXX XX) formats are used.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font used for general information is easy to read, but the font for the contact details, Times New Roman, is hard to read.

Accessibility of certain website elements

The version for persons with vision impairments operates inadequately.

Rules of conduct

N/A.

Websites of the raion military administrations (RMA)

Kryvyi Rih RMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

The information on protective facilities is only available as <u>news in a dynamic news feed</u>. There is no separate section with static information on shelters and other important information.

The information is only provided as addresses, without a description of facilities, which makes it difficult to find premises, namely, when there are possibly no information signs with street names or building numbers.

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

N/A

Rules of conduct

The information on the <u>action algorithm in case of an air raid alert</u> is posted as news in the newsfeed and is not pinned as static material on the website. It makes it difficult to find important information.

Alternative text for non-text content

 Information on <u>actions in case of radiation pollution</u> is provided as images with no alternative text.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Complex structures, such as 'civil protection alerting signals', are sometimes used.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

- The version for persons with vision impairments does not contain a function to increase the font.
- Hyperlinks are adequately described.

Bucha RMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

There is no information on what documents are necessary for IDPs to obtain benefits or how to obtain humanitarian assistance.

Alternative text for non-text content

The images contain no alternative text, or there is no text material that duplicates the visual one. The information on the possibility of <u>obtaining financial assistance for internally displaced persons</u> and humanitarian assistance is posted as images with no alternative text formats.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

Text readability

Correct date (DD.MM.YYYY) formats are used.

Important information that is directly associated with the recipients of information often follows related information on legislation on the decisions made.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

- Text can be enlarged without losing quality. However, when the version for persons with vision impairments is selected, the website takes the user to the main page instead of showing the page where the user was.
- Hyperlinks are adequately described.

Rules of conduct

N/A

Myrhorod RMA

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

N/A

Rules of conduct

N/A

Websites of the local councils

Kramatorsk City Council

Alerts, operational information on hazards

N/A

Evacuation routes, temporary shelters

Information on temporary shelter options is provided as text.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are not used; instead, there is space in between lines.
- Correct telephone number (0XX XXX XX XX) formats are mostly used.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Some of the titles are written in CAPITAL LETTERS.
- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

- Text can be enlarged without losing quality.
- Hyperlinks are not used, and links are provided without accompanying text.

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Information on <u>humanitarian assistance for citizens with reduced mobility</u> and the <u>humanitarian headquarters</u> is provided as text. The text is easy to understand and is accompanied with pictograms.

Alternative text for non-text content

- Images contain alternative text, or there is text material that duplicates the visual one.
- There is no text inside the images.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Rules of conduct

N/A

Kharkiv City Council

Alerts, operational information on hazards

Information associated with <u>operational information on the full-scale invasion</u> can be found in the Emergency Information Section together with other operational information. There is no separate section with operational information on the war and the full-scale invasion.

Evacuation routes, temporary shelters

N/A

Availability of protective facilities

N/A

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

N/A

Rules of conduct

N/A

Telegram channels of the Heads of the oblast military administrations (OMA)

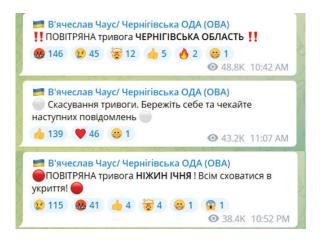
Telegram channel of the Head of Chernihiv OMA, Viacheslav Chaus

Alternative text for non-text content

 Images mostly contain text material that duplicates the visual one. There are some exceptions, for example, rules for publishing information for citizens.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all. For example, in publications in <u>stores</u> or pharmacies.
- Using correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XX) formats.
- In most posts, the principal information is presented first, except for some posts, for example, about the <u>algorithm for connecting to</u> <u>networks of other operators</u>.
- The air raid alerts contained pictograms of different colours to show the start and end of an alert, which makes it easier for stressed persons, and persons with vision or cognitive impairments to perceive information. However, the pictograms were sometimes different. Sometimes there were white or green circles to designate the end of an alert, and the start of an alert was marked with red circles or exclamation marks.



User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Important information is rarely <u>underlined</u>, for example, in the post about changes in the curfew.
- Italics is sometimes used, e.g., in posts on pharmacies.
- All the words in titles are rarely written in CAPITAL LETTERS, for example, in air raid alerts.

Multimedia accessible for perception

Most video addresses have no alternative text, except for several video addresses from 13 to 20 March, which were followed by the text in a separate post and explained as the poor internet connection, which prevented citizens from downloading videos.

Telegram channel of the Head of Mykolaiv OMA, Vitalii Kim

Alternative text for non-text content

- The information on the rules of conduct and the signal "Attention all!", as well as check points, was presented as images with no alternative text.
- Text is placed inside images.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.

Accessibility of certain website elements

- The video addresses with confirmation of martial law imposed and the rules of conduct on 24 February had no subtitles or alternative text.
- The video addresses on 24 February on the state of affairs as of 11:30 and subsequent addresses on 24 and 25 February were interpreted into Ukrainian sign language.

Accessibility of certain website elements

 After 25 February, there was no sign language interpreting, but partial alternative text was provided. The video briefing of the General Staff had the alternative text during the first days.

Telegram channel of the Head of Zaporizhzhia OSA, Oleksandr Starukh

Alternative text for non-text content

• The information on how to act in case of explosion is presented as images with <u>text material</u> that duplicates the visual one.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all, for example, in the posts on <u>immediate</u> needs for the military.
- Correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XX) formats are used.
- Pictograms and visual elements accompany text posts.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- Some of the posts on the rules of conduct use font with shadows.
- The information is structured by its importance, separated with paragraphs and visual elements.

Multimedia accessible for perception

The video briefings #everyfriday have no alternative text, subtitles, or sign language interpreting. Some video addresses have brief alternative text, but most are posted without any subtitles or alternative text. At the beginning of the invasion, video addresses had no subtitles, and some operational information was posted in writing.

Entities providing humanitarian assistance

Facebook page of Red Cross Zakarpattia

Alternative text for non-text content

- <u>Images</u> contain no alternative text or text material that duplicates the visual one.
- The text is posted as images.

Text readability

- The sentences in <u>applications for humanitarian assistance</u> contain more than one idea.
- The sentences have more than 15 words.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are not often used in <u>applications</u>. Instead all the items are in one sentence with no list at all.
- Using correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XX) formats.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Multimedia accessible for perception

• There are subtitles of educational video materials, like <u>videos on</u> first aid published on the resource.

eDopomoga

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Alternative text for non-text content

The image of a map with the regions whose residents may be registered as IDPs has no alternative text in the section itself. There is alternative text in another section on the website.

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Sophisticated words, like 'offline', are sometimes used. Simple and understandable language is used in other cases.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Multimedia accessible for perception

Some visual content in the video materials is not accompanied by subtitles, for example, names of websites with additional information. Some subtitles are inadequately integrated, for example, the entire text of the subtitles for the entire video in one slide.

Статус *

Accessibility of certain website elements

Text can be enlarged up to 500% without losing quality.

Humanitarian Headquarters of Kyiv

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

Persons with disabilities are specified as one of the categories of vulnerable persons in a status section on the application for assistance.

Особа з інвалідністю
Родина, які виховує дітей з інвалідністю
Одинока людина літнього віку
Паліативний хворий

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations like 'IDP', 'FN' are sometimes used.
- Simple words are used.
- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

 Text can be enlarged without losing quality. There is no button for persons with vision impairments.

SpivDiia

Receiving humanitarian, social assistance, in particular for IDPs with disabilities

The question about belonging to a vulnerable category contains a disability option.

	впо
	Багатодітна родина
	Втрата роботи
	Пенсіонер
	Мають інвалідність 1-ої або 2-ої групи
/	Мають інвалідність 3-ої або хронічні хвороби
	Вагітна

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.

- Sophisticated words, like 'shelter' and 'hub', are sometimes used.
- Using bulleted lists instead of mentioning all the items in one sentence with no list at all.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Accessibility of certain website elements

The website has no button for persons with vision impairments, but text can be enlarged without losing quality.

Entities informing of temporary accommodation

Prykhystok

Temporary shelters

All the information is posted in text format, which makes it accessible to everyone.

A category of persons with disabilities is not specified in the questionnaire on readiness to give shelter to an IDP in the section on those who can be given shelter.

Кого ви готові розмістити		
Будь-кого		
Сім'ї з дітьми (чоловік, дружина, діти)		
Сім'ї без дітей (подружжя, пари)		
Жінки		
Діти		

Text readability

The website is a good example of simple and understandable communication.

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations like 'LSGV', 'RCMU', 'IDP' that are not explained are sometimes used.
- Simple words are used instead of sophisticated ones.
- Bulleted lists are mostly used instead of mentioning all the items in one sentence with no list at all.
- The correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XXX) formats are used.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.
- The font size is at least 12 pt.
- The font is legible.

Multimedia accessible for perception

 The video is followed by the text on the Prykhystok website and explanations on how it works.

Accessibility of certain website elements

- Text cannot be enlarged without losing quality.
- Hyperlinks are adequately described.

Notification channels of Ukrzaliznytsia JSC

Telegram channel of Ukrzaliznytsia

Most information on evacuation trains is provided in an accessible text format. <u>During the first days of the invasion</u>, the information was not always structured, but a week later the posts already had bulleted lists and paragraphs. In particular, a positive example is the explanation on how to find your way at Przemyśl Station.

Alternative text for non-text content

- Most images contain text material that duplicates the visual one. The posts on the <u>actual situation at the railway</u> and the working stations had no alternative text. However, the information on checkpoints was followed by text.
- There is no text inside the images.

Text readability

- One sentence, one idea.
- One sentence has no more than 15 words.
- Abbreviations are either avoided or spelled out in the first use.
- Simple words are used instead of sophisticated ones. Complex structures, such as 'railway infrastructure facilities', are sometimes used.

- Bulleted lists are used instead of mentioning all the items in one sentence with no list at all. At the beginning of the invasion, <u>some</u> posts on evacuation trains were not duly labelled.
- The correct date (DD.MM.YYYY) and phone number (0XX XXX XXX XXX) formats are used.

User-friendly layout

- Contrast between text and background is at least 4.5:1.
- Text is left-aligned.
- Only hyperlinks are underlined.
- Overuse of CAPITAL LETTERS is avoided.

Website of Ukrzaliznytsia

The website has no information on evacuation via Ukrzaliznytsia.

There is an easy-to-find section for persons with disabilities on the website. Some information is not available on the website; for example, the link to an interactive map of accessible elements at the railway station does not function.

Text can be enlarged without losing quality.

Other digital channels

Telegram channel of President Zelenskyy

The post on the imposition of martial law on 24 February at 06:42 had no alternative text for the audio, no subtitles, and no accompanying text in the post itself. The first address with accompanying text that confirmed Russia's invasion was published on 24 February at 23:25. The address had the video with no subtitles and the accompanying text "Russia attacked the entire territory of Ukraine today. Our defenders have done a lot today. Glory to the Armed Forces of Ukraine!" That accompanying text is only a small percentage of the content of the video address.

The first video with subtitles was posted on 25 February at 8 a.m. and had English subtitles. Posts with partial descriptions of the content of video addresses started to appear on 26 February. However, the description duplicated less than 10% of the content.

<u>The first video address with Ukrainian subtitles</u> was posted on 13 April. That video address was non-recurring, and other regular video addresses were published without Ukrainian subtitles, although English subtitles have regularly been added since 25 February. <u>The President's address on the Day of Remembrance</u> and Reconciliation on 8 May had Ukrainian subtitles, but the contract of colours was inadequate.

On <u>24 June</u>, <u>6 September</u>, and <u>15 September</u>, the video addresses had Ukrainian subtitles, but they were not regular addresses by the President.

As of 6 October 2022, none of the regular addresses of the President to Ukrainians have had Ukrainian subtitles or sign language interpreting. At the same time, almost all the addresses had English subtitles.

Website of the General Staff of the Armed Forces of Ukraine

Operational information is provided with alternative text for video addresses.

Mobile emergency alert applications

Air Raid Alert application

The principal function of the application, namely alerts, is accessible. The content is provided in text format, which makes it accessible to persons with vision impairments since it can be 'read' with screen readers. Alerts also contain pictograms and are accompanied by a vibration signal, which differs from classic vibration signals, making it accessible to users with hearing impairments. The function of audio alerts also makes the application accessible to persons with vision impairments.

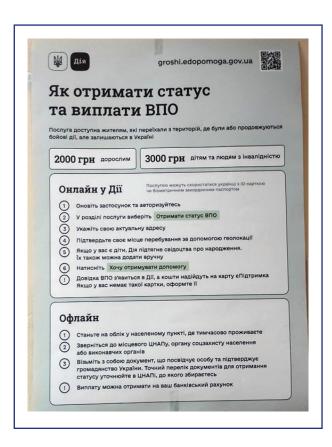
Kyiv Digital application

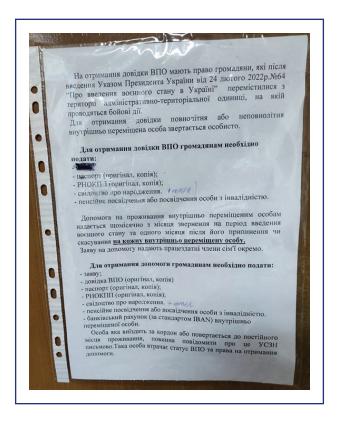
Alerts in the application are not followed by a unique vibration or audio signal. They are lost among other notifications on the telephone, which reduces the efficiency of the application since the alerts are not very noticeable and can be disregarded.

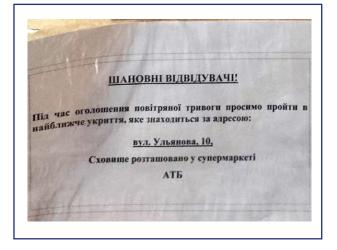
ANNEX 4.

Photos of the information boards and information products

 Social Protection Department, 30/32 Volodymyra Antonovycha Street, Tsentralnyi District, Dnipro.

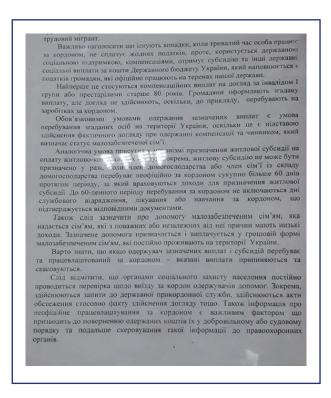




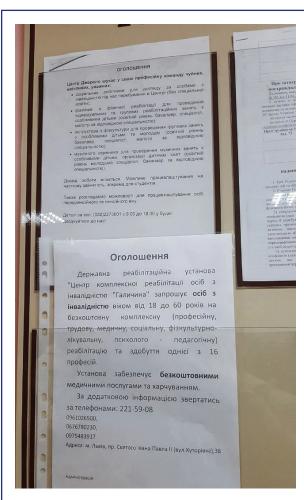


2. Shevchenkivskyi Social Protection Department, 11 Lypynskoho Street, Lviv.

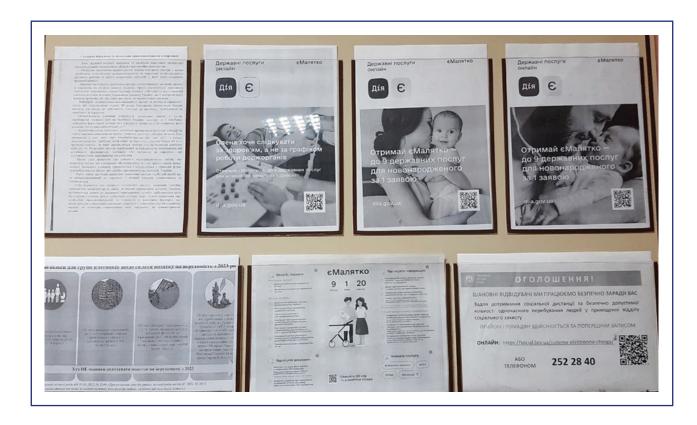




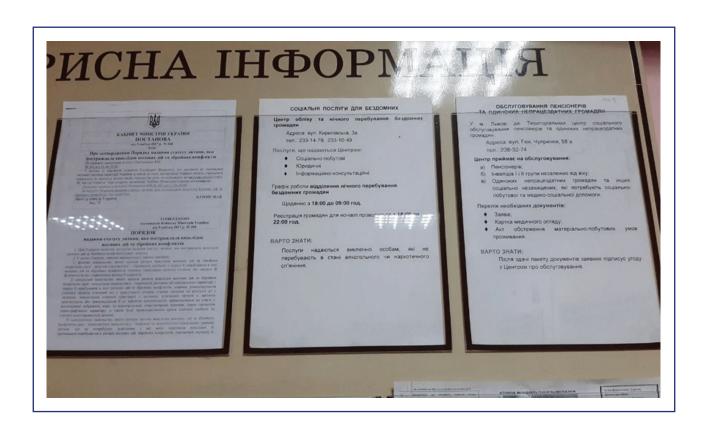


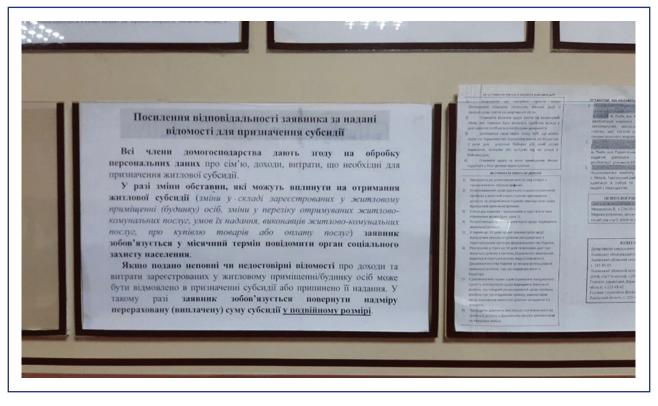


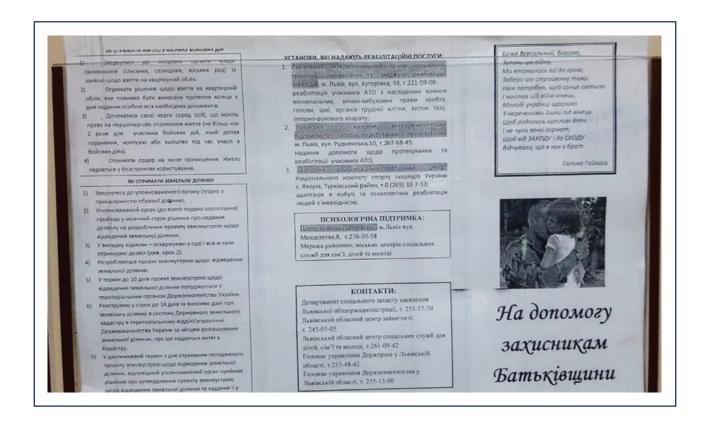
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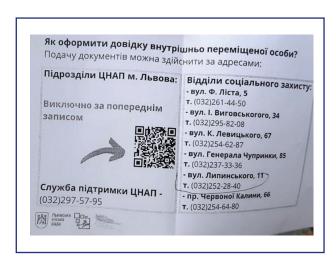


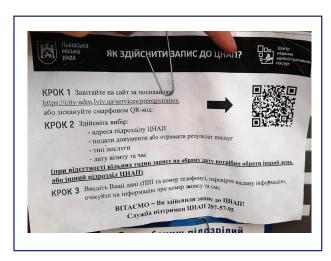






Administrative service centre (ASC) 14a Khvylovoho Street, Lviv





ANNEX 5. List of the Respondents in the Semi-Structured Interviews

- 1. Government Commissioner for the Rights of Persons with Disabilities
- 2. Representative of the Secretariat of the Ukrainian Parliament Commissioner for Human Rights
- **3.** Representative of the Civil Protection Organisation Department of the State Emergency Service of Ukraine
- 4. Representative of the National Social Service of Ukraine
- **5.** Representative of the Ministry for Reintegration of the Temporarily Occupied Territories (written responses, no spoken)
- **6.** Representative of the Directorate for Developing Social Services and Protecting Children's Rights of the Ministry of Social Policy of Ukraine
- **7.** Representative of the Directorate for Social Protection of Rights of Persons with Disabilities of the Ministry of Social Policy of Ukraine
- **8.** Representative of the Department for Monitoring Compliance with the European Equality Standards of the Ministry of Social Policy of Ukraine
- Representatives of the Social Protection Department of Donetsk Oblast State Administration
- **10.** Representative of the Social Protection Department of Luhansk Oblast State Administration
- **11.** Representative of the Social Protection Department of Lviv Oblast State Administration
- 12. Representative of the Kharkiv City Council
- **13.** Representative of the Kramatorsk City Council
- 14. Representative of the Sloviansk City Council
- **15.** Deputy Head of the USoD
- **16.** Head of the Enterprise of the Civil Association "Dnipro Training and Production Enterprise of the Ukrainian Association of the Blind"
- **17.** Representative of the Republican House of Sound Recording and Printing of the Ukrainian Association of the Blind (RHSRP of the UAoB)
- **18.** Head of the SCO "All-Ukrainian Association of Sign Language Interpreters and Persons with Disabilities"

