

UKRAINE

Looking ahead to 2023: outlook and risk analysis

AIM

This report aims to identify the most important contextual developments in Ukraine and provide an anticipatory level of analysis. It includes an outlook into how the current dynamics can develop and on potential risks that could further deteriorate the situation of the affected population. The Current Context Analysis and Outlook section aims to identify probable developments, while the Risk Analysis section aims to identify plausible futures with significant negative humanitarian consequences.

This product aims to provide a comprehensive analysis of multiple potential drivers of the humanitarian situation. It encompasses conflict, economic, and sociopolitical analysis to highlight potential deteriorations in the context and inform the framing of operations, strategies, and policies.

LIMITATIONS

Information and data gaps, particularly concerning the humanitarian situation in non-government-controlled areas (NGCAs) and other inaccessible areas in Ukraine, limit the analysis. A lack of precise information on the extent of the damage and state of critical infrastructure makes it difficult to estimate the impact of potential risks concerning missile attacks.

While all information is current at the time of publication, the fluidity of the situation means significant changes can occur quickly.

Some of the main humanitarian events and risks are covered in the following report. However not all existing developments and risks in the Ukraine crisis can be included.

METHODOLOGY

This report relies on the review of publicly available secondary sources, key informant interviews, data analysis, and joint analysis with over 20 organisations, including representatives of INGOs, UN agencies, and academic institutions.

ACAPS analysts conduct context monitoring daily. The regular monitoring of trends, triggers (changes in a context that can lead to a hazard), and hazards (events, processes, or human activities that can lead to negative humanitarian consequences) allows us to regularly identify risks. You can access the ACAPS Risk List [here](#).

Risks are developed in accordance with the [ACAPS Risk Methodology](#), which defines 'risk' as the probability of a hazard or multiple hazards materialising combined with their estimated impact.

The risks presented in this report are at the subnational level in Ukraine for three to six months from the time of publication in January 2022 until June 2023.

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CURRENT CONTEXT ANALYSIS AND OUTLOOK

This section outlines the analysis of key recent developments and dynamics shaping the humanitarian situation in Ukraine and provides an outlook on how these dynamics are likely to develop over the next two to three months. Outlook sections aim to identify probable humanitarian consequences if the current trends continue.

Targeted attacks on civilian infrastructure affecting energy, water, and heating services

Current impact overview

Since 10 October 2022, Russian forces have been conducting intensive air attacks against Ukraine deliberately targeting civilian infrastructure. These attacks have damaged more than half of Ukraine's energy infrastructure (OHCHR 25/11/2022; ACF et al. 25/11/2022). The largest air attack since the full-scale invasion started in February 2022 happened on 15 November, with over 90 missiles fired on 17 oblasts in Ukraine causing widespread power outages (OCHA 15/11/2022).

Widespread attacks against Ukraine's power generation and distribution system resulted in an approximately 30% electricity deficit in late November, forcing the authorities to implement planned and emergency power outages across the country. These outages have affected water and heating services (REACH 09/11/2022; ACF et al. 25/11/2022; Reuters 29/11/2022).

While the largest number of verified direct attacks occurred in the Zaporizhzhia, Donetsk, Kharkiv, Dnipropetrovsk, Kyiv, and Mykolaiv regions, power disruptions have affected the entire country (PAX 22/12/2022). The areas most affected by electricity disruption in late November included Kherson city, which remained almost entirely without power; Kyiv city, where approximately 25% of population had no access to electricity; and parts of Chernihiv, Lviv, Odesa, and Zaporizhzhia oblasts, which were completely disconnected from electricity (ECHO 28/11/2022; OCHA 23/11/2022). There is also scarce information available on the impacts of the attacks on areas close to frontlines and those currently under Russian control.

As at 13 December, twelve million consumers were disconnected from electricity in Ukraine following the attacks (President of Ukraine 13/12/2022). With a shortage of up to 30% of electricity, power is only available five to six hours per day across the country (OCHA 30/11/2022; TxT

Report 29/11/2022). To curb consumption and lower the load on the energy grid considering infrastructure damage, the Government of Ukraine (GoU) has introduced rolling blackouts (Interfax 04/11/2022). The power outages disrupt public services, including transportation, communications, livelihoods, and access to running water and heating – a particular concern in the winter season given subzero temperatures (UNHCR 11/11/2022; OCHA 16/11/2022; REACH 09/11/2022). Attacks and electricity shortages have resulted in a lack of connectivity and limited access to the internet, constraining humanitarian assistance (ACF et al. 25/11/2022).

Key factors to watch in 2023

Capacity of Russian forces to sustain the attacks: the expected developments concerning infrastructure damage rely predominantly on the capacity of Russian forces to sustain their attacks. While multiple governmental and intelligence reports suggest that Russia's arsenal of missiles might be depleting after the recent widespread attacks, the weapons used to attack the energy infrastructure in October suggest that Russia might be using and further procuring weapons from other countries, such as Iran and North Korea, despite both countries denying accusations (NYT 18/11/2022; DW 26/10/2022; ISW 4 and 7 January 2023). There are also reports suggesting that Russia is internally producing drones and missiles, which would further bolster their capacity (NYT 18/11/2022). If Russia manages to procure or produce ballistic missiles with a 300km and 700km range, there is a high probability that the attacks become more extensive, as Ukraine has no effective defence against them (Ukrainska Pravda 07/11/2022; CNN 01/11/2022; NYT 18/11/2022).

Escalatory spiral: there have been regular air attacks on civilian infrastructure since 10 October. There is a high probability that they will likely continue throughout winter when the impact of the lack of basic services is most significant. The retaliatory character of these attacks suggests that they are likely to escalate after symbolic or significant gains of the Ukrainian forces, as during the large-scale attacks on 15 November, after the Ukrainian army entered Kherson, and 10 October, after the attack on the Kerch Straight bridge connecting Russia to Crimea (NPR 11/11/2022; CNN 15/11/2022 and 10/10/2022; The Guardian 09/10/2022; RFE/RL 11/10/2022).

Capacity of Ukrainian forces and authorities to defend the infrastructure: while Ukrainian air defence systems have been successful in intercepting many of the missiles, current capacity to defend their territory from attacks is considered stretched. Further capacity depends on the support of other countries (Reuters 12/10/2022). Ukraine lacks sufficient air defence systems and has had to reposition some from the frontlines to protect its power infrastructure (Wilson Center 19/10/2022). If missile attacks continue, even with all the pledged support from other countries, Ukraine will not be able to defend its entire territory against air attacks (Reuters 12/10/2022).

Ukrainian capacity to repair infrastructure: in late 2022, efforts to repair infrastructure and sustain basic energy, heating, and water services resulted in the successful restoration of water services in Kyiv and energy infrastructure covering approximately 80% of the consumption needs across Ukraine (Interfax 7/12/2022; ECHO 28/11/2022). Regardless, repeatedly targeted areas and those that have sustained more extensive damage are facing prolonged power, heating, and water shortages. Technical equipment shortages, including of power and current transformers and generators, and a lack of compatible components for ageing infrastructure are hampering repairs (REACH 09/11/2022). The generators are also becoming increasingly expensive, and those that Ukraine has managed to procure depend on a steady supply of fuel, challenging given the global increase in prices (FP 28/11/2022; CSIS 08/11/2022). Lower temperatures also diminish the capacity to repair damaged infrastructure, leading to longer outages and a more severe impact on the population (ACF et al. 25/11/2022).

Anticipated impact

With more than half of Ukraine's power infrastructure damaged and given the diminishing capacity to repair damage, the power grid's integrity is set to increasingly erode, causing the scheduled and emergency power outages to persist at least until mid-March if the current scale of the missile attacks continues (ACF et al. 25/11/2022; FP 28/11/2022; Reuters 12/12/2022).

Electricity shortages are anticipated to cause intermittent blackouts, which are likely to affect more than ten million people across the country (Ukrainska Pravda 15/11/2022). In big cities and in central and western Ukraine, blackouts will affect entire populations of cities and oblasts, but those areas are expected to see a quick repair of any damage, with restoring power supplies in critical sites prioritised over households and businesses (The Kyiv Independent 24/11/2022). Even those only affected by intermittent power outages are will be pushed to drastically reducing their use of electricity and suffer from the disruption of livelihoods and communications (Reuters 26/11/2022). Roughly 53% of urban households across Ukraine rely on increasingly unreliable district heating (Time 20/10/2022). As a result, people are turning to wood-burning or fuel-based ovens, generators, and plug-in heaters – options that will all become increasingly expensive due to the high demand. Electricity cuts will also affect the use of plug-in heaters, and the use of generators is prohibited in multi-storey buildings, further limiting heating options (FP 28/11/2022; OCHA 16/11/2022; Time 20/10/2022).

Areas closer to the frontlines, those under the control of Russia, and those recently reclaimed by Ukraine are expected to experience more persistent outages and water and heating service disruptions, to the point where further repairs will become impossible given the scale of the damage (PIN 22/11/2022; OCHA 26/10/2022). Those areas will experience significant civilian and energy infrastructure damage, including deliberate damage left by withdrawing forces, as was the case when retreating Russian forces blew up a bridge in Kherson city in November 2022 (CBS News 13/11/2022). People remaining in those areas largely comprise the

elderly, people with disabilities, and those with medical conditions extremely vulnerable to service disruptions and whose coping capacities have been largely depleted after months of conflict. The restoration of power, water, and heating services is already impossible in parts of Kharkiv and Kherson oblasts because of the exceptionally severe damage inflicted (OCHA 30/11/2022).

As the temperature falls, nine out of the 24 oblasts in Ukraine have a very high or high probability of extreme cold exposure (-15° C or lower) over December–February, introducing the risks of hypothermia, frostbite, or cardiac arrest in case of prolonged exposure without protection (REACH 09/11/2022; Cheshire Jr. 06/01/2016).

At least 450,000 people are expected to be displaced per month in the first quarter of 2023, including new and repeated displacements from areas such as Donetsk, Kharkiv, Kherson, Luhansk, Mykolaiv, and Zaporizhzhia oblasts, where access to services is already limited and assistance is not easily accessible. Evacuations have already been encouraged from Donetsk, Kharkiv, Kherson, and Luhansk (ECHO 28/11/2022; OCHA 16/11/2022; CSIS 08/11/2022; IOM 27/10/2022). IDPs and returnees across Ukraine are highly vulnerable to any service disruptions (IOM 27/10/2022). IDPs often live in collective centres, which are not equipped for the winter and urgently need heating and fuel. Returnees often reside in damaged houses with no access to essential supplies, including water, heating, and electricity (OCHA 30/11/2022).

Current air attacks will continue damaging and destructing residential buildings, killing and injuring civilians, disrupting livelihoods and communications, and affecting the delivery of critical services, such as education and health. There are already reports of doctors having to operate with flashlights and poor hygiene protocols given the lack of water (OCHA 30/11/2022 and 16/11/2022). The situation will increase mental distress among adults and children and other protection concerns, including gender-based violence (GBV) (ACF et al. 25/11/2022).

The lack of power and internet connection will hamper humanitarian operations through disruptions in aid systems and the lack of communication between responders and with affected communities (FP 28/11/2022; ECHO 28/11/2022; ACF et al. 25/11/2022). These constraints are expected to increase the gap between needs and available assistance, increasing both the volume and severity of humanitarian needs in Ukraine. A limited number of organisations are prepared to respond to increased needs in the upcoming winter months (OCHA 26/10/2022).

Aggravating factors

Critical damage or the destruction of power infrastructure, cyberattacks on a grid network, or the targeting of nuclear plants are anticipated to lead to a large-scale disruption of services across the country, triggering acute humanitarian needs, mass displacement, and severe limitations on humanitarian operations (CSIS 08/11/2022).

The large-scale disruption of services is expected to at least temporarily, paralyse the country during winter. A lack of electricity will disrupt not only water and heating services but also transport, communications, and healthcare, likely leading to the large-scale displacement of more than one million people within and outside of the country within a month (Reuters 12/12/2022; NRC 23/11/2022; OCHA 16/11/2022; ACF et al. 25/11/2022; RFE/RL 20/10/2022).

Socioeconomic impact of the conflict driving unemployment and poverty

Current impact overview

The full-scale invasion of Ukraine and the resulting conflict have affected the economy of Ukraine after leading to logistical constraints, economic uncertainty, production facilities and infrastructure sustaining damage, and disruptions to the labour force and supply and demand mechanisms (WB 31/07/2022). Real gross domestic product (GDP) decreased by 15.1% in the first quarter of 2022 and 37.2% in the second quarter of 2022 compared to the same period in 2021 (SSSU accessed 16/11/2022).

Unemployment and livelihood disruptions are increasingly hampering people's ability to meet their basic needs, especially since year-on-year consumer inflation reached 26.5% in November 2022 (KII 23/10/2022; KII 26/10/2022 b; NBU 14/12/2022). The unemployment rate reached around 34% in May, when an estimated five million people lost their jobs because of conflict, up from 10.5% from the same period in 2021 (The Kyiv Independent 20/11/2022; Slovo i Dilo 06/06/2021). By the end of 2022, the unemployment rate stabilised at around 24.5% (The Kyiv Independent 30/12/2022). The lack of employment is particularly a concern among IDPs (REACH 31/08/2022). Only 34% of IDPs reported having paid work in October 2022. The main constraints to employment for both IDPs and non-IDPs are the lack of jobs matching their experience or interest, the overall lack of jobs given active conflict in the area, and low salaries (IOM 04/11/2022).

77% of people across the country reported an income decrease in September compared to pre-February 2022 levels (NBU 05/10/2022). Approximately 24% of IDPs reported that the combined monthly income of their households was less than UAH 5,000 (approximately USD 135), roughly UAH 1,700 (approximately 46 USD) lower than the national minimum wage. Among the non-displaced population, 29% indicated that their household income was less than UAH 5,000 (USD 135) (IOM 04/11/2022).

Reduced incomes compounded by high commodity prices, particularly fuel and food, result in a significant need for cash support among the affected population. 67% of IDPs and up to 50% of returnees and the non-displaced population were in need of financial assistance, which remained the most pressing need reported in Ukraine in November. By the end of the

month, over 40% of all households in Ukraine had completely exhausted their savings. Nearly all displaced households are pushed to resort to coping mechanisms, with more than 50% of households reducing food consumption and more than 60% of households reducing their usage of utilities, including electricity, gas, and solid fuel (IOM 13/12/2022). 10.3 million people in Ukraine consume an insufficient amount of food (an increase of over 2.8 million people since September) (WFP accessed 21/12/2022).

Although detailed information on the economic situation in NGCAs is not available, the economic context is expected to be much more dire than in territories under the control of the GoU. In Mariupol, residents are clearing debris from an industrial plant for free in exchange for potential future employment there (TSN 06/05/2022; Mariupol Now Telegram 18/08/2022).

Key factors to watch in 2023

Economic activity: the longer the conflict continues, the longer Ukraine has to focus a sizeable amount of its spending on defence activities rather than reconstruction and mitigating the economic impacts of the war. The increase in economic activity nationwide in September was mainly driven by yearly seasonal activities (agriculture and construction). The missile attacks and prolonged power outages negatively impacted economic activity in the last quarter of 2022 and resulted in a up to 23% decrease in demand for labour (the number of available jobs) compared to September (NBU 07/09/2022 and 03/10/2022 and 5/01/2023). As businesses adapt to the new operating environment, their confidence in the future steadily increases. That said, surveyed business owners continue to report that they do not intend to increase their workforce. The destruction of production facilities; increase in energy prices; decrease in imports, exports, and investments; and decreased purchasing power of the population will continue to hamper economic recovery (NBU 03/10/2022; WB 04/10/2022).

Grain agreement: the restoration of the grain corridor has allowed for increased production volumes in the food industry and new demand for the construction of related infrastructure (e.g. grain terminals, bread factories, and cow sheds) (NBU 05/10/2022). The grain corridor deal was extended for a further 120 days in November, allowing for the bolstering of agricultural activity and increased exportation, supporting economic activity at least until the end of the first quarter of 2023 (Bloomberg 17/11/2022; NBU 09/12/2022).

Control over the territories: large industries that have historically been present in the east of the country have become non-functional or disconnected from government-controlled areas. The presence of NGCAs in the country and unstable control over conflict-affected territories will continue affecting the economy by disrupting supply chains between different areas of control. Areas near the frontlines are expected to face stronger economic impacts given the large scale of population displacement reducing available staff and the demand for goods. As at early November, 80% of IDPs (5.19 million people) originated from eastern

and southern oblasts (IOM 04/11/2022). Ukrainian forces regaining control over territories will improve or resume the economic activity in those regions, but resulting displacement and active shelling are expected to continue hampering sustainable improvements both in Kharkiv and Kherson oblasts (NBU 05/10/2022).

Attacks on energy infrastructure: as a result of the continued air attacks on power infrastructure, Ukraine has already halted exports of electric power sales to Europe, a significant source of income that was expected to increase the annual GDP by up to 3% (GoU 17/06/2022). Power cuts will also continue having cascading effects on the delivery of other services, such as internet connectivity, heat, and water, which many businesses rely on for their operations (EBA 21/10/2022). Ukraine's Ministry of Economy predicts that continued electricity shortages will affect businesses in the country, leading to an even greater drop in GDP than previously expected (UNIAN 14/11/2022).

Foreign financial support in the form of grants and loans is key to keeping Ukraine's balance of payments positive (with more inflows than outflows). In fact, in August 2022, the country had a USD 2 billion positive balance, with USD 3 billion of inflows from official grants (NBU 05/10/2022). However, a 40% decrease in the export of goods and services in 2022 had a detrimental effect on Ukraine's balance of payments. The receipt of international grants, remittances from migrants, and the freezing of debt service helped to stabilise the current account, but the outflow of foreign capital due to hostilities resulted in a deficit. It is expected that the total balance of payments for 2022 will be negative, reaching over USD 6 billion (The Kyiv Independent 30/12/2023). The 2023 state budget has a USD 23 billion deficit that foreign assistance needs to cover (Reuters 03/11/2022). As at 20 October, foreign aid had covered 36% of budget expenditures since the full-scale invasion, lower than 38% from taxes (Forbes 20/10/2022). Foreign assistance will play a key role in the ability of Ukrainian states to continue funding their social assistance programmes. Foreign financial support for Ukraine has already come under scrutiny during the midterm elections in the United States. While support for Ukraine remains a part of US foreign policy, the rhetoric during the campaign season suggests that stricter controls on the use of financial aid and increased transparency requirements could emerge (Razumkov Centre 25/11/2022; Al Jazeera 24/11/2022).

Anticipated impact

If the conflict intensity remains the same, including continued attacks on critical infrastructure, the economic consequences will continue worsening in the short term. The estimates of GDP losses in 2022 range from 31.5 to 40% given the impacts of attacks on electrical infrastructure, and the GDP is projected to continue decreasing further (WB 30/09/2022; UNIAN 14/11/2022). Any GDP growth in 2023 would be dependent on the cessation of hostilities, a partial restoration of infrastructure, and adaptation to the conditions of martial law and

would not exceed 4.5% (The Kyiv Independent 30/12/2023). According to the National Bank's projections, inflation will drop to around 20% in 2023 (NBU 27/10/2022).

Electricity shortages will continue affecting the labour market, causing both the demand and supply of labour to weaken. While nominal wages have remained similar to 2021 level, real wages, particularly in the private sector, have decreased by 27% in 2022 and are not likely to significantly improve over the next two to three months (NBU 09/12/2022; The Kyiv Independent 30/12/2023).

Continued power cuts, especially in the cold winter weather, will further drive the demand for equipment, including generators, fuel, heaters, stoves, solid fuels, and those needed to allow people to continue working during power cuts, such as laptops and uninterruptible power supplies. In the short and medium term, local supply chains are unlikely to be able to adapt to the increased demand for these products. The situation will increase their prices and limit their availability, increasing the cost of doing business and decreasing salaries and income, by extension pushing more people into poverty.

An important aggravating factor to consider is the impact of global recession primarily given high inflation rates and the subsequent anti-inflationary measures of central banks. Global recession would trigger an economic slowdown, leading to the decrease in foreign funds allocated for Ukraine, preventing the country from meeting its budgetary goals and jeopardising social support services.

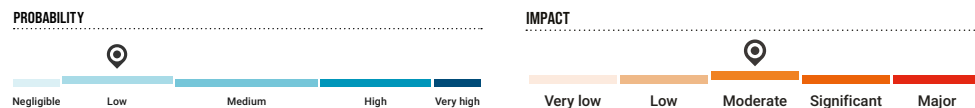
Deteriorating economic outcomes are going to lead to a further increase in acute humanitarian needs of cash, food, and NFIs, as vulnerable population, particularly the elderly, will further deplete savings and resort to increasingly negative coping mechanisms. Negative coping mechanisms are often associated with an increase in protection concerns, such as GBV and violence against children (UNICEF 17/10/2022; Oxfam 25/11/2021). Other stress factors, such as anxieties from air strikes, the uncertain outcome of the conflict, and shifting gender roles in the household and the economy because of the mobilisation of men, are another area where tensions may arise within families (CESVI et al. 28/09/2022).

RISK ANALYSIS

The risk analysis section identifies potential future events that could affect the humanitarian situation, the probability of these events occurring, and their potential humanitarian consequences. The ACAPS Risk Methodology defines risk as the probability of a hazard or multiple hazards materialising, combined with the estimated impact of such hazards.

Risk 1

The prolonged strain on local responders leads to burnout and reduced response capacity, severely affecting the provision of humanitarian assistance in frontline and remote areas



Rationale

Ukrainian NGOs and volunteers have continued as the main providers of direct humanitarian assistance since the escalation of conflict on 24 February, especially in remote and frontline areas (ACAPS 25/05/2022; NP 11/07/2022; RI 08/09/2022). Local volunteers also help communities remain resilient during periods of Russian-imposed control, when access to aid and public services is typically cut off (The Kyiv Independent 28/11/2022). Because of limited bureaucracy, a higher risk tolerance, and access to social networks and local knowledge, regional responders have been able to identify and react swiftly to intensifying needs in each locality, while international bodies have often struggled to establish or scale up their in-country presence (Groupe URD 28/08/2022; ICG 28/07/2022). Nevertheless, the UN and INGOs are the recipients of the vast majority of funding (OCHA 28/11/2022).

As the crisis has continued to demand a high intensity and large-scale response, the sustainability of the local humanitarian effort has been of increasing concern (ICG 26/09/2022). Aside from facing constant safety and security risks, responders face burnout, stress, the displacement of staff, and burdensome bureaucratic procedures for obtaining and managing funds from international bodies (NP 26/09/2022; ALNAP 01/06/2022; ACAPS 25/05/2022; RI 09/09/2022).

While access remains severely constrained across all oblasts along the frontlines because of insecurity, Ukrainian military advances have re-established control over large areas in October–November, granting access to high numbers of people in need of assistance who were previously beyond the reach of humanitarians (ALNAP 01/06/2022; NRC 23/11/2022; OCHA 30/11/2022). The escalation of attacks on the energy infrastructure and the onset of winter will further increase humanitarian needs throughout the country as well as procurement challenges, particularly for construction and insulation materials for repairing damaged homes. At the same time, Ukrainians will have less disposable income to donate in support of the local response as they grapple with high unemployment, rising inflation, and declining incomes, and donations from abroad are expected to decrease as well because of conflict fatigue and the negative economic effects of the Ukraine crisis on Western economies (The Week 08/11/2022; The Guardian 06/11/2022).

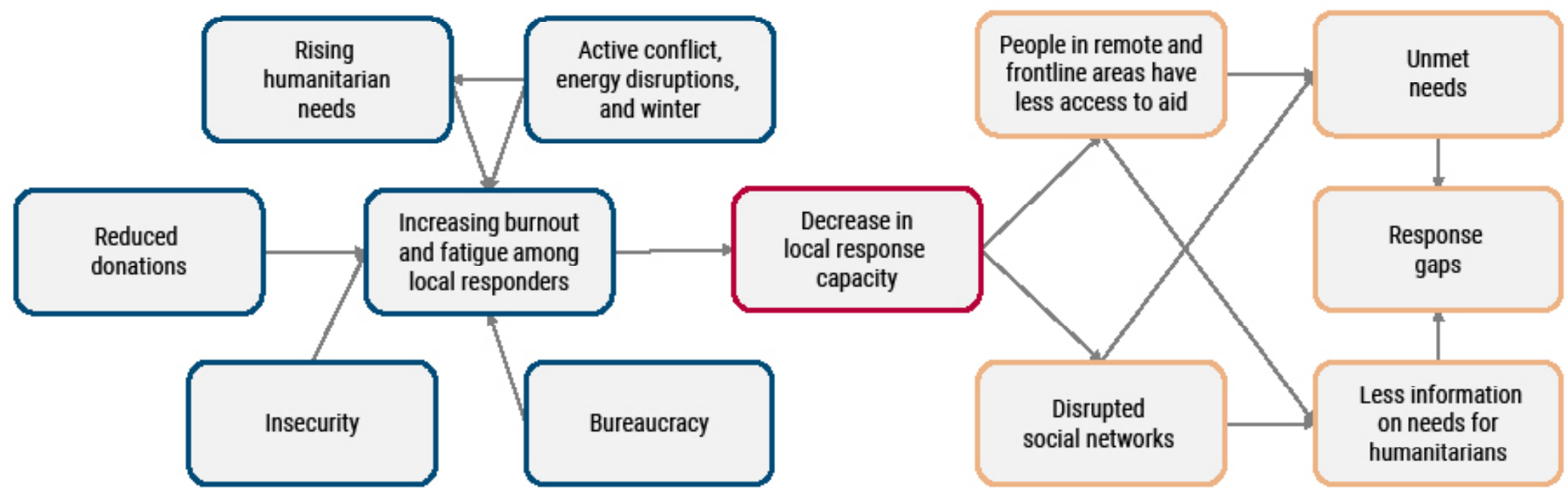
Without adequate resources to counter these worsening strains on local responders, their capacity to provide assistance will be reduced, affecting the people who depend on humanitarian assistance in frontline and remote areas. As more areas become accessible, the need for an effective humanitarian response will continue to increase and depend on local responders.

Impact

Local responders are critical in getting humanitarian aid to remote and frontline areas where many people stay despite the damage and destruction. If burnout and a lack of resources incapacitate them, people in these areas would have severely reduced access to critical and emergency food, WASH, health, NFI, and shelter assistance. Public health would suffer, as a lack of aid combined with harsh winter weather would create conditions that leave people more vulnerable to the spread of disease. Over time, they may feel abandoned, and their resilience will deteriorate, leading to poor mental health outcomes and the use of negative coping mechanisms. All these factors will reduce trust in both humanitarians and public authorities in the most conflict-affected communities, creating social stress and making it more difficult to implement relief, recovery, and reconstruction projects in the future.

International responders will not effectively fill the gaps left by Ukrainian NGOs and volunteers because social networks, local knowledge and resources, and language skills cannot be easily replicated or transferred. Local responders have also developed significant trust within affected populations and are key to a sustainable response and reconstruction in the longer term. If local responders and volunteers are incapacitated, outside organisations will not be able to coordinate humanitarian action as effectively. Without adequate access or information, they risk distributing aid unevenly or delivering the wrong kind of assistance entirely, leading to widening gaps in the response and increased suffering among affected people – particularly those in more remote areas or with low mobility who cannot access humanitarian distribution points on their own (KII 30/10/2022 a).

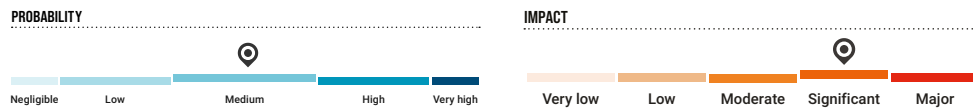
Risk 1: chain of plausibility



Source: ACAPS

Risk 2

Changes to mechanisms for social service payments lead to increased socioeconomic stress, undermining social cohesion and community resilience



Rationale

The 2023 GoU budget has a deficit of USD 38 billion, in comparison to USD 6.7 billion in 2021 (GoU 12/2020; The Kyiv Independent 14/09/2022). The 2023 budget adopted on 3 November by the GoU includes a quadruple increase in the country's defence expenditure (over 40% of the budget). At the same time, the budget for social services will be USD 21.7 billion (over 30% of the budget). Considering the budget deficit, the GoU plans for most of the social expenditure to be covered by external donors, foreign grants, and loans, which is subject to the availability of funding. Because of economic austerity, neither the minimum wage nor the average living wage will increase in 2023. There are also no plans for the revision of pensions and other social benefits during the year (Razumkov Centre 18/10/2022). Inflation was expected to reach 30% by the end of 2022, and real wages dropped by 27%, diminishing the purchasing power of Ukrainian households (The Kyiv Independent 30/12/2023; WB accessed 11/11/2022; Razumkov Centre 18/10/2022).

In October 2022, the GoU was planning to merge its social benefits fund with the state pension fund, as part of an overall restructuring of the economy owing to the war (GoU 30/09/2022). This plan intended to come into effect in January 2023. Ukraine's social benefits fund provided payments for citizens unable to work temporarily because of illnesses, maternity leaves, disabilities, or workplace accidents. The fund also provided medical and social services to those who have contributed before. The COVID-19 pandemic and the current conflict have left the fund with a huge deficit. By October 2022, over 1.75 million citizens have applied for assistance from the fund, resulting in over three months of administrative delays in payments (OpenDemocracy 12/10/2022).

The GoU argues that the merger of the social benefits fund with the state pension fund will cut administrative costs and streamline payments, addressing the deficit, but many within

Ukrainian civil society suggest that it is untimely while the war is taking place. Critics fear that the plan, which was implemented prior to the February 2022 invasion, could delay social assistance mechanisms put in place in response to it (Suspilne 10/11/2022). They also highlight that displacement has led to a reduced number of staff, limiting administrative capacity in implementing the plan. Because the pension fund itself already had a deficit, there is concern that it cannot fulfil its new role especially during a time of war (Social Insurance Fund of Ukraine Telegram 23/09/2022; OpenDemocracy 12/10/2022).

If efforts to make social expenditures dependent on external sources and to restructure the economy disrupt social payments to affected populations, the resulting household economic stress will drastically affect poverty levels and increase the risks of adoption of negative coping mechanisms and undermine social cohesion.

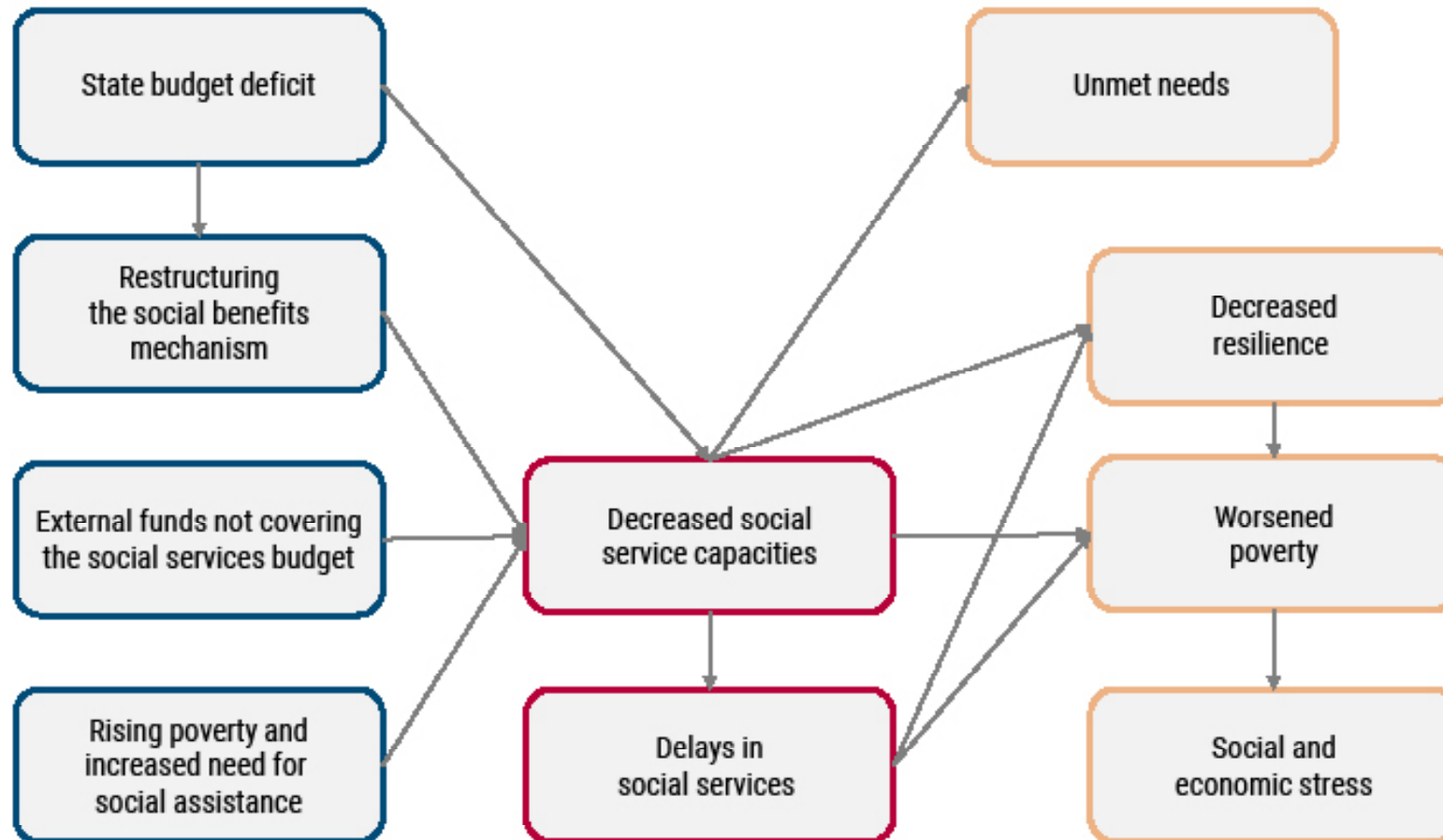
Impact

Disruptions to social assistance benefits, combined with high unemployment and rising inflation, will further worsen poverty in Ukraine. By early 2023, 25% of the population in the country will be living in poverty (less than the global line of USD 6.85 a day), which is more than a fourfold increase from 5.5% of the population in 2021. 60% of the population in the country will also have an income below the national poverty line (WB accessed 11/11/2022). This issue means that the number of people applying for assistance will increase even as payments are delayed or insufficient. Large families, elderly people, people with disabilities, female-headed households, people with financial burdens, and people without productive assets nor family and social support networks will be the most affected.

As the system of social service provision deteriorates because of the war and its impact on Ukraine's budget, vulnerable people will find themselves further marginalised and experience increased suffering from psychological distress, illness, violence, and a poor quality of life (Cedos 17/05/2022). Without adequate protection, people may find themselves at increased risk of forced labour and human trafficking or turn to negative and crisis coping mechanisms, such as the selling of critical assets or engaging in transactional sex for survival (IOM 18/10/2022; UN 22/09/2022; ILO 04/10/2022).

Without the mitigating effects of timely and sufficient social payments, rising poverty, in combination with large-scale displacement, will aggravate social tensions and GBV resulting from financial stress. In particular, social cohesion between host communities and IDPs is already fraying in some areas. Tensions between host communities and IDPs have appeared in places like Zaporizhzhia, Mykolaiv, and other areas hosting large numbers of displaced people while also suffering frequent attacks. Host communities blame IDPs for a perceived rise in crime and for competing with them for scarce job opportunities. Zaporizhzhia residents also complain about aid distribution practices. In other oblasts, such as Kharkiv, residents complained about people abusing the system and trying to obtain multiple aid packages (Left Bank Analytics 03/11/2022).

Risk 2: chain of plausibility



LEGEND

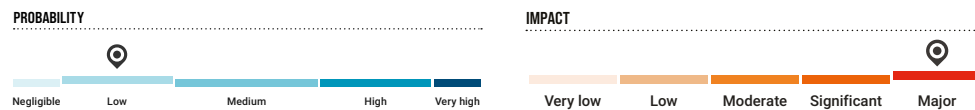
ASSUMPTIONS

HAZARD

CONSEQUENCES

Risk 3

Criticism of the Russian leadership for military withdrawals leads to increased retaliatory attacks against civilians in Ukraine and use of unconventional weapons



Rationale

The withdrawal of Russian forces from Kharkiv and Kherson oblasts in September and November 2022, respectively, generated significant criticism within Russia. Influential hardliners in the country, including the head of the Wagner armed group, Yevgeny Prigozhin, have criticised the regime and advocated for an escalation of attacks against Ukraine (ISW accessed 10/11/2022). This escalation would involve continuing to target civilian infrastructure and potentially use unconventional weapons, both in retaliation for Ukrainian advances and as an overall strategy for furthering the invasion's objectives (USIP 05/10/2022; ISW accessed 09/11/2022; CFR 11/10/2022).

Prior to the invasion, observers predicted that Putin would remain in power until 2036 (The Guardian 05/04/2021). That said, his power largely stems from his image as a strong leader and support from his inner circle. Criticisms among elites because of continued military losses in Ukraine, combined with domestic discontent arising from the impact of the war within Russia, could call this image into question (Al Jazeera 06/12/2022). Putin will be increasingly concerned with shoring up the status of his own power and hitting back against opponents who want to gain power for themselves (TWP 18/11/2022). One indicator of his increasing wariness of dissent is the expansion of the infamous 'foreign agents' law in December 2022 to include almost any person or organisation expressing opinions about Russian authorities (HRW 01/12/2022; RFE/RL 01/12/2022).

Military losses in Ukraine have affected perceptions of Russian military power inside Russia. Increasing criticism of the Russian leadership for military withdrawals from Ukrainian territories, particularly strategic and symbolic areas such as Crimea, will lead to increased retaliatory attacks against civilians in Ukraine. Russia could launch a renewed barrage of attacks that result in the widespread destruction of critical infrastructure, including electrical

grids, communication facilities, and decision-making centres. Attacks with chemical or even nuclear weapons cannot be excluded as a means of trying to force Ukraine into making territorial concessions (NATO 29/11/2022; RFE/RL 04/12/2022; RUSI 01/12/2022).

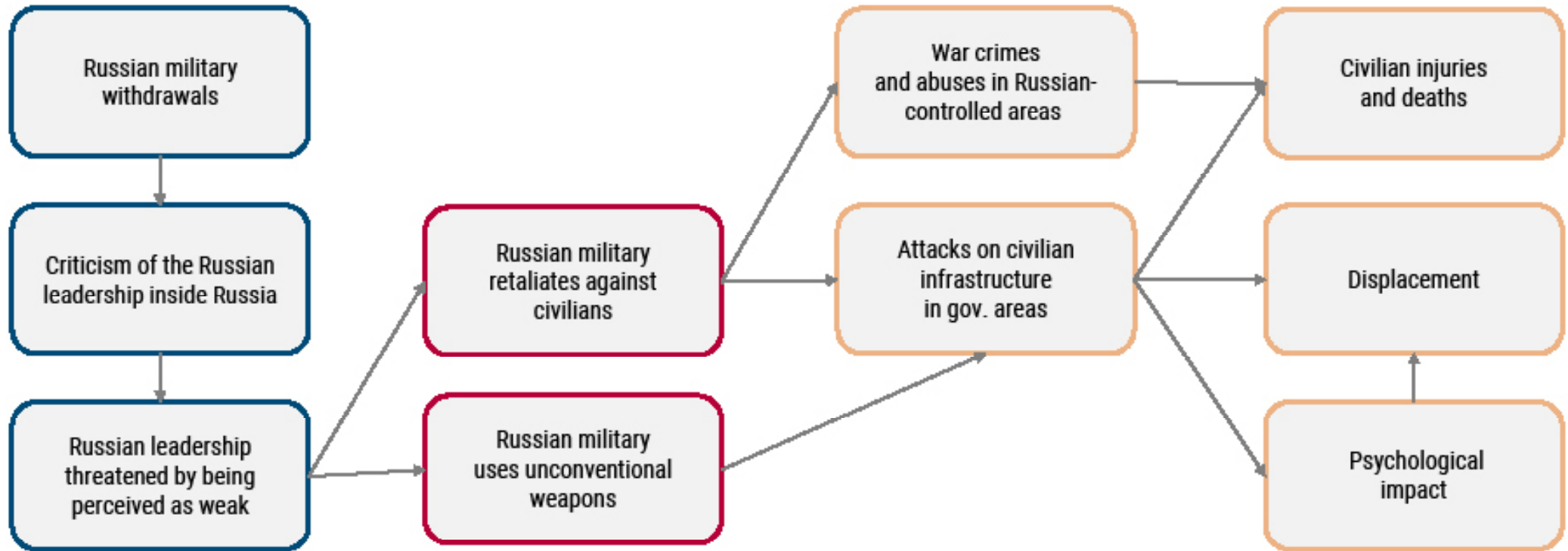
Impact

According to the UN, as at early December 2022, the Russian invasion had resulted in over 17,000 Ukrainian civilian fatalities since 24 February 2022, although the actual figure is likely much higher (OHCHR 05/12/2022; AP News 10/11/2022). The impact of the use of unconventional weapons, such as chemical or nuclear weapons, would greatly depend on the location targeted, but it is highly likely to result in a rapid increase in civilian deaths and injuries and mass displacement. These weapons can also have long-term environmental and health consequences, contaminating large areas of land or water and causing severe access disruptions as well as long-term health problems for those who are exposed to them.

If Russian troops already experiencing low morale perceive increasing instability or infighting inside the Kremlin, this will further reduce discipline and increase the lack of accountability. This, in turn, could result in even greater numbers of atrocity crimes and incidences of looting of homes and businesses – especially if irregular armed groups like Wagner continue to consolidate their influence. The use of unconventional weapons will also result in more damage to civilian and critical infrastructure and lead to a further loss of livelihoods from contaminated areas, both within Ukraine and abroad, causing long-term consequences and protracted crisis.

The use of unconventional weapons will embolden Russian soldiers and armed groups to use more violence. Atrocities against civilians will intensify psychological trauma, compounding the current stresses of displacement; the lack of access to aid or services; the deaths and injuries of civilians; the destruction of homes, jobs, and social networks; and persistent fear. Children, youth, and older persons are particularly vulnerable to these effects (NRC 24/08/2022; MSF 13/09/2022; News Medical 11/11/2022; HelpAge 24/05/2022). Despite devastating effects on mental health and the high prevalence of trauma-related disorders among Ukrainians, challenges such as stigma, lack of awareness, and lack of resources will make it harder for people to recover (Javanbakht 05/08/2022; Charlson et al. 11/06/2019).

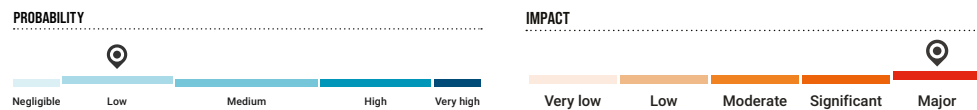
Risk 3: chain of plausibility



Source: ACAPS

Risk 4

Targeting the structures that support Ukrainian nuclear power plants' safety causes more extensive power outages and potential nuclear incidents, leading to immediate and long-term radioactive-related health issues and environmental contamination



Rationale

Russian forces have continuously targeted Ukraine's energy infrastructure since the February 2022 invasion, with a particular focus on weaponising critical nuclear power plants (NPPs) that drive Ukrainian energy production (Atlantic Council 17/10/2022; CSIS 08/11/2022; Al Jazeera 04/09/2022). Temporary power outages have affected all Ukrainian nuclear power plants since 10 October and put several of them at least temporarily out of use (IAEA 23/11/2022; OCHA 30/11/2022). As more than half of Ukraine's electricity in 2021 was produced with nuclear power, the further disconnection of those plants, either because of power shortages or direct attacks, would lead to a severe disruption of electricity across the country (Al Jazeera 04/09/2022).

Russian forces temporarily controlled the nuclear site in Chernobyl, Kyiv oblast, at the beginning of the invasion (BBC 07/03/2022; ISW accessed 09/10/2022; USIP 24/08/2022). They have been in control of the Zaporizhzhia nuclear power plant (ZNPP) – the largest in Europe, with six reactors – since March 2022. There was also an attack on the power lines of the South Ukraine NPP in Mykolaiv oblast in response to Russian hardliners who called for such a retaliation following the Ukrainian counteroffensive in Kharkiv oblast (NPR 19/09/2022; IAEA 03/11/2022). Most recently, in November 2022, all NPPs were temporarily shut down because of a successive wave of Russian attacks on Ukraine's power grid, causing countrywide power outages (Al Jazeera 04/09/2022; Ukrainska Pravda 11/09/2022; IAEA 08/10/2022).

The ZNPP is particularly vulnerable to a retaliatory attack should Ukrainian forces continue to regain significant territory back, particularly towards Crimea that has been occupied by Russia since 2014. Occupying the ZNPP is strategic for Russia partly because it can continue to intimidate Ukraine and its western allies with the threat of a nuclear accident should

Ukrainian forces try to recapture it by force (European Pravda 06/09/2022). The ZNPP's main power lines have been routinely targeted, compromising the safety of the site and forcing the facility to rely solely on backup diesel generators to continue cooling the reactor (IAEA 03/11/2022). The disaster at the Fukushima Daiichi nuclear power plant in 2011 provides a worrying lesson, as a nuclear meltdown resulted from the failure of backup diesel generators after they were flooded. While the ZNPP's generators would not face this kind of environmental catastrophe, problems with the availability of fuel or military damage and the impossibility of a quick repair because of insecurity would have similarly catastrophic consequences (NPR 09/16/2022; IWPR 07/09/2022).

The ZNPP is located on the Kakhovka Reservoir on the Dnipro River, which supplies the water that cools its spent fuel rods to prevent a nuclear meltdown. Russian forces could attack the Kakhovka dam to cause a major flooding event, which would prevent or delay Ukraine from advancing into eastern Kherson (ISW 21/10/2022). Any attacks on the dam would lead to an irreversible reduction in the water level in the Kakhovka Reservoir, which would in turn risk a nuclear reactor accident (Interfax 07/11/2022).

If Russia starts regularly targeting other NPP power lines or conducting strikes in proximity, it may force Ukraine to shut down reactors in other NPPs and in turn reduce power production, requiring Ukraine to import more electricity instead of exporting it (Ukrainska Pravda 28/11/2022). Because of Russian attacks, Ukraine has already halted electricity exports, which is a much-needed economic source at a time when the 2023 state budget has a deficit of 20% of the projected GDP (Ceenergy 12/10/2022; Interfax 23/11/2022; Wilson Center 19/09/2022). The current weaponisation of nuclear plants by Russian forces will continue to undermine the safety of NPPs and, in the worst-case scenario, result in a nuclear incident with severe health and environmental consequences (BBC 21/11/2022).

Impact

Russian attacks against Ukraine's power grid will result in more frequent emergency shutdowns of NPPs, creating nuclear safety concerns and significantly disrupting the population's access to power. This issue, in turn, will limit access to electricity, running water, heating, communications, and public services. Frequent power outages will affect small businesses, which will either close down, reduce their services and in turn diminish employees' incomes, or increase expenses because of their reliance on diesel generators.

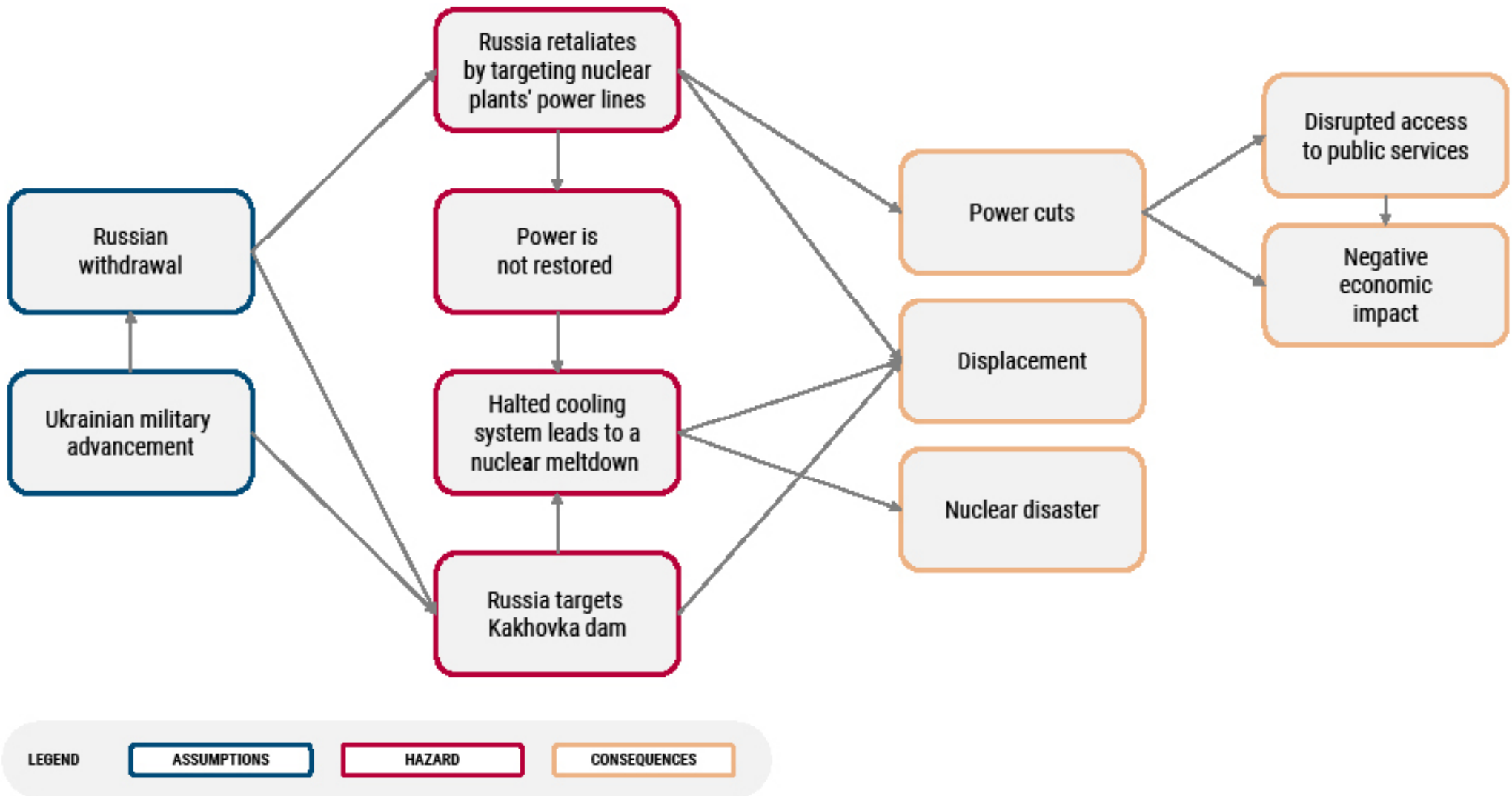
Safety concerns will lead to the displacement of people living near NPPs and in turn increase the number of people requiring urgent humanitarian assistance, including emergency shelter. People living in surrounding areas will experience severe psychological stress as they face evacuations and protracted displacement (DW 22/11/2022). Should a nuclear meltdown occur, people in Ukraine and further afield would suffer devastating health effects in both the short and long term (Think Global Health 29/08/2022).

NPP site staff and residents of nearby areas would be at immediate risk of acute radiation syndrome, which causes nausea, vomiting, skin burns, immune deficiency, loss of consciousness, and, potentially, death (Tsagkaris et al. 17/10/2022). Children and younger people are more at risk of the negative effects of radiation because they have more time to develop as they grow, putting them at heightened risk of cancer or cardiovascular and musculoskeletal diseases in the future (Kutanzi et al. 28/10/2016; WHO 04/03/2022).

Healthcare system and emergency services will be further strained with the public health crisis, especially as these systems are already affected by the infrastructure damage and power cuts (WHO 21/11/2022). Depending on wind conditions, there is a low threat that the detrimental health effects of radioactive material could spread to people throughout Ukraine, as well as Russia, Europe, and potentially the Middle East and Northern Africa (Chatham House 12/08/2022). The public health crisis will further strain healthcare systems and emergency services.

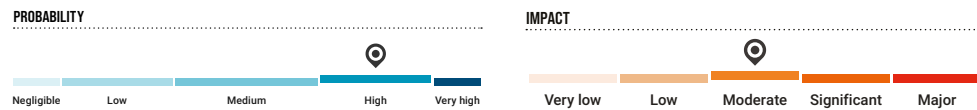
In the event of shelling and damage to nuclear fuel and waste storage containers, the ZNPP's proximity to the Dnipro River could result in the release of radioactive material into the Black Sea. This would cause both environmental and economic disasters, as the Black Sea's semi-closed 'cul-de-sac' shape would trap the material, killing off marine life and demolishing the fishing industries of surrounding countries (NBC News 13/08/2022; USIP 24/08/2022). Contaminated water in both the Dnipro River and the Kakhovka Reservoir would also severely damage local agriculture and the livelihoods that depend on it in the area, as these are important sources for agricultural irrigation (Chatham House 12/08/2022; TMRF 13/04/2022).

Risk 4: chain of plausibility



Risk 5

Russian territorial advancements in Donetsk oblast lead to displacement, protection risks, and impeded access to basic goods, services, and humanitarian aid



Rationale

Russian forces are conducting offensive military operations on the frontline close to Avdiivka, Bakhmut, and Vuhledar cities in Donetsk oblast, aiming to encircle Bakhmut city (ISW accessed 12/12/2022; OSW 07/12/2022; ISW accessed 10/12/2022; PBS 10/12/2022). They made territorial gains in the area as at late November and early December (ISW 28/11/2022; ISW accessed 01/12/2022; The Economist 06/12/2022). Although it would be of limited strategic value, the capture of Bakhmut would potentially allow Russian forces to advance towards Kramatorsk and Sloviansk cities (Al Jazeera 28/10/2022). It would also be a face-saving measure given Russia's failure to make significant territorial gains since July 2022 and its retreat from Kharkiv and Kherson oblasts in September and November 2022.

The mercenary Wagner Group is leading the Russian offensive in Donetsk oblast, relying on rank-and-file soldiers redeployed from Kherson in a high-casualty slow-gains strategy (BBC 15/10/2022; ISW accessed 10/11/2022; NYT 27/11/2022). Success in Bakhmut would help Prigozhin, head of the Wagner Group, expand his growing political influence in Russia (NYT 06/11/2022). Although Russian forces have been widely implicated in violence against civilians in Ukraine, the Wagner Group is especially notorious for its brutality and lack of accountability in the other countries where it operates, including Mali and the Central African Republic (ACLEDD 30/08/2022).

Over 70,00 people lived in Bakhmut city prior to February 2022, but as at January 2023, only an estimated 7,000 people remained (NYT 09/01/2023). Constant shelling by Russian forces has resulted in widespread damage, civilian casualties, and consistent insecurity. Access to electricity, running water, heating, gas, shelter repair materials, medicine, health services, and communications is severely constrained. People no longer able to cope with these conditions are forced to rely on local responders with limited resources to evacuate (BBC 15/10/2022; Suspilne 22/11/2022).

If Russian forces ultimately take control of Bakhmut, civilians will suffer increased casualties, forced displacement, and extremely harsh living conditions with limited access to humanitarian aid.

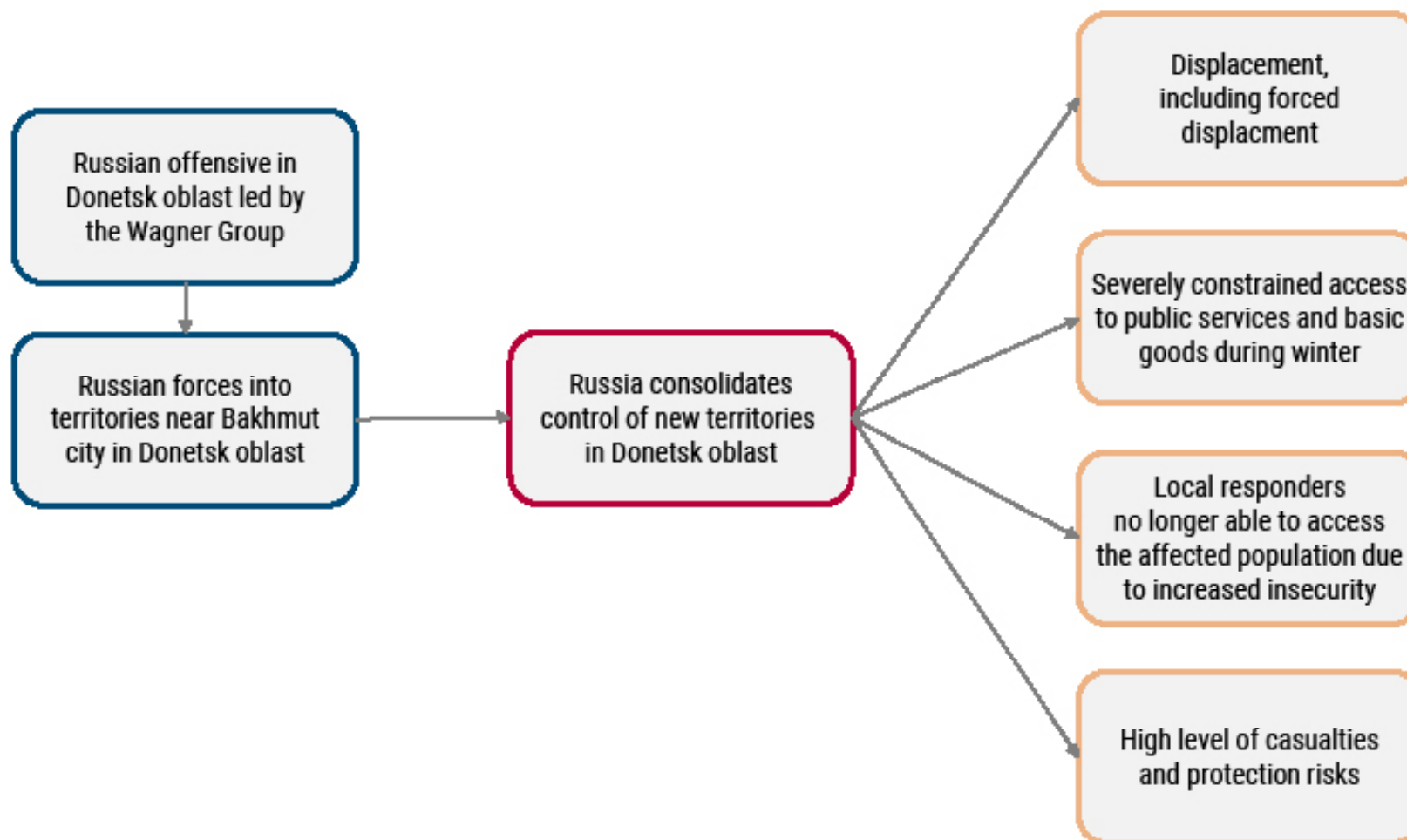
Impact

Based on experiences in newly accessible areas, Russian advances will put civilians at risk of injuries, death, and further abuses, including sexual violence (UN 23/09/2022; ACLED 30/08/2022; RFE/RL 05/12/2022). Local responders will also face higher casualties as they work to evacuate people whom international bodies cannot reach (RFERL 03/12/2022). The civilians who choose to stay behind or are unable to leave will experience 'filtration' and forced transfers to Russia, where they may be detained, disappeared, or unable to voluntarily return to Ukraine (OMCT 12/12/2022; HRW 01/09/2022. CSIS 03/10/2022).

Although Russian territorial advances cause displacement among all population groups, older people are often the last to leave, and many choose not to leave their homes at all (BBC 15/10/2022; RFE/RL 03/12/22). If Russia takes control of Bakhmut city, there is a high probability that civilians will lack access to heating, food, and critical medicine when humanitarian aid and supplies are cut off. This outcome will leave older people in particular at high risk of death in areas under Russian control (AP 12/10/2022). The situation will continue to worsen as Russian forces divert medical resources in Donetsk oblast from civilians to their own wounded soldiers. As civilian surgeries and medical procedures are postponed, patients face increased health complications and death (The Kyiv Independent 04/12/2022).

If the frontline shifts as Russia continues its offensive in Donetsk, new areas will come within range of targeted Russian shelling. This situation will expose new groups of people to damage, destruction, and, in turn, more insecurity, reduced access to public services and humanitarian aid, and displacement (Ukrinform 11/11/2022).

Risk 5: chain of plausibility



LEGEND

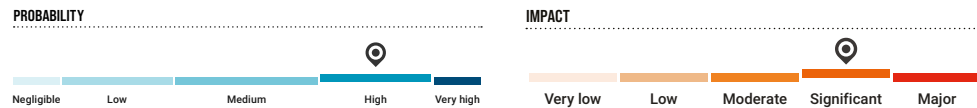
ASSUMPTIONS

HAZARD

CONSEQUENCES

Risk 6

Fighting intensifies in eastern Kherson oblast during the winter months, deteriorating security levels and the population



Rationale

Ukraine announced a southern counteroffensive in late August 2022 (Kyiv Post 29/08/2022). By mid-November, the Ukrainian army had pushed Russian forces out of parts of southeastern Mykolaiv and western Kherson oblasts (Ukrainska Pravda 11/11/2022; ISW accessed 20/11/2022).

Since pushing Russian forces out of parts of southeastern Mykolaiv and western Kherson oblasts (Ukrainska Pravda 11/11/2022; ISW accessed 20/11/2022), Ukraine has focused its counteroffensive on southern Kherson oblast and the Crimean Peninsula. Crimea, which Russia has occupied since 2014, is highly strategic for Russia given its navy base, access to the Black Sea, and symbolic value. Russian forces began fortifying their positions in eastern Kherson oblast in early October (ISW accessed 07/10/2022). As they withdrew, they continued heavily shelling the area, which prompted voluntary evacuations (Al Jazeera 20/11/2022).

Weather conditions during the cold season, which will endure until April, will influence the pace of the conflict for Ukrainian and Russian forces. While spring rains make the ground muddy, slowing the movement of tanks and army vehicles, frozen ground with the onset of winter will allow for faster troop movements. Winter also leads to decreased forest coverage, making it easier to spot and target enemy forces (NYT 12/11/2022). Given these conditions, it is not expected that either Russia or Ukraine intends to reduce military activities during the winter (ISW accessed 10/11/2022).

To prevent or delay Ukrainian advances, Russian forces could instigate mass flooding by attacking the Kakhovka dam on the Dnipro River in Kherson oblast. A major attack would flood over 80 settlements in the vicinity and affect thousands of people (ISW accessed 01/12/2022; ISW accessed 11/11/2022). Russian forces already partially damaged the Kakhovka dam when they withdrew from western Kherson on 11 November 2022 (Militaryni 12/11/2022).

This attack is part of a pattern of Russian attacks on dams, including a missile assault on a dam in Dnipropetrovsk in September which would have affected 150,000 people had the damage been more substantial (Babel 21/10/2022).

Because control over the Kherson oblast is key to the highly strategic Crimean Peninsula, there is a significant risk of intensified hostilities, the use of unconventional weapons, and major protection concerns for civilians in the area.

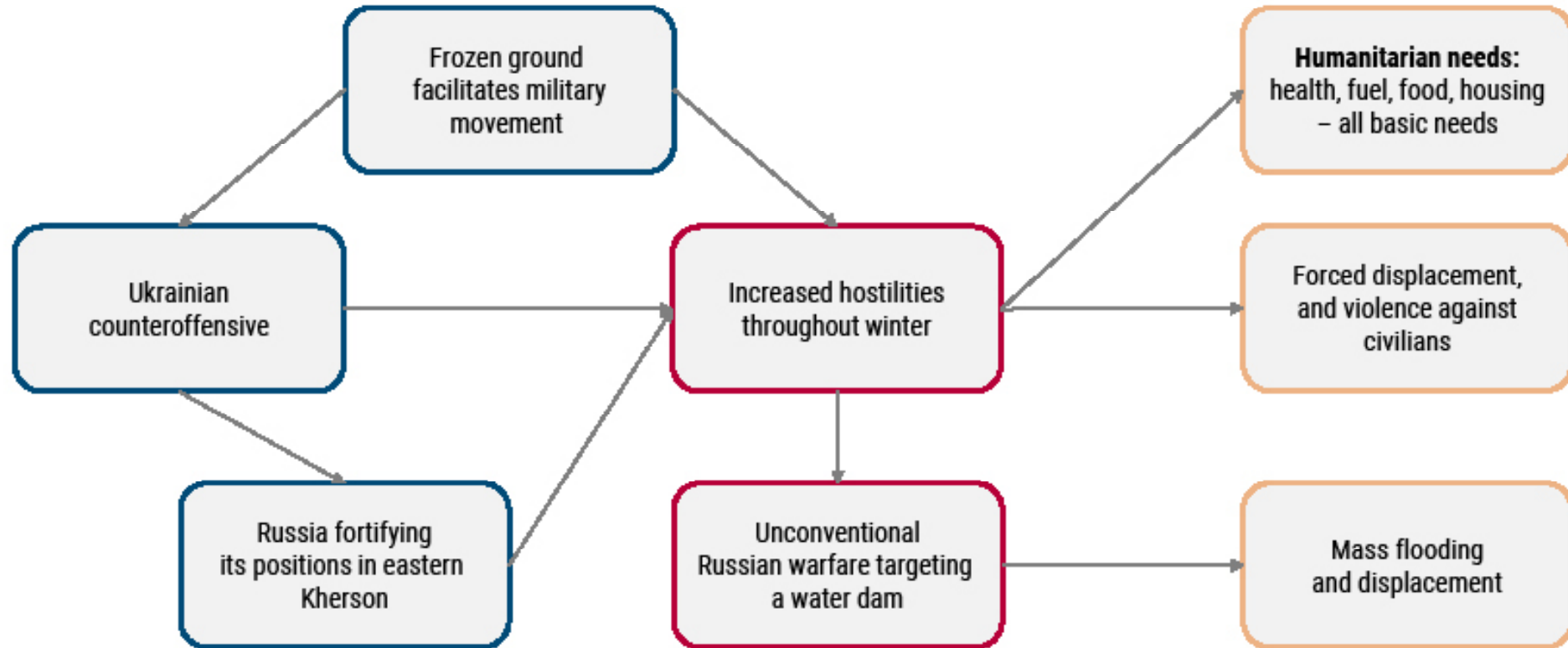
Impact

A lack of access to running water, electricity, gas, heating, medicine, and other critical needs in the Russian-controlled part of Kherson oblast during winter will make living conditions harsh and worsen vulnerabilities to illnesses and declined health conditions, particularly for elderly people who have a higher incidence of chronic diseases and disabilities and are less willing to evacuate (MSF 02/12/2022).

The looting of private homes, businesses, and public infrastructure by the Russian soldiers will have long-term impacts on the affected population, as it leads to the loss of income and livelihoods and to depleted savings and national resources, making people more vulnerable to poverty because of eroded resilience. It also makes increases their dependence on humanitarian aid when the area becomes accessible (VOA 05/11/2022; Al Jazeera 20/11/2022).

Russian forces will continue to engage in heavy shelling, which will prompt evacuations (Al Jazeera 20/11/2022). Russian forces will likely forcibly transfer people, including unaccompanied children, from Kherson oblast to Russia (Ukrinform 03/11/2022 and 05/11/2022; ISW accessed 11/11/2022; Ukrainska Pravda 18/11/2022). Forced displacement uproots communities from their places of origin, important social support systems, and livelihoods, putting families at risk of separation and men, women, and children at high risk of abuse and detention by the Russian forces (AI 10/11/2022). Men, including members of Tatar ethnic minorities in Crimea, are particularly at risk of forced recruitment by the Russian military (ISW accessed 01/10/2022; KHPG 26/09/2022).

Risk 6: chain of plausibility



LEGEND

ASSUMPTIONS

HAZARD

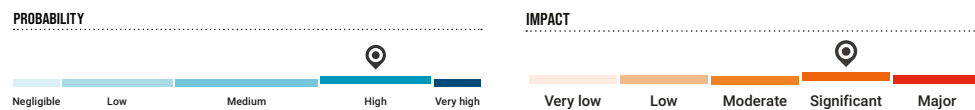
CONSEQUENCES

RISK ANALYSIS

Risk 7

Increased fighting and power and gas supply disruptions severely limit people's ability to access heating, resulting in the loss of life and increased acute humanitarian needs in Russian-controlled areas and areas of active ground conflict in the southeast

Ukraine risk update from the [Global Risk Report](#) published in October 2022 and still relevant



Rationale

Areas of active ground conflict and areas under Russian control continue to lack access to power and gas supplies. This issue continues to be a high humanitarian concern, particularly as temperatures reach subzero degrees during winter. Following the withdrawal of the Russian army, newly accessible areas in Kharkiv and Kherson had largely no power, electricity, running water, or services to meet other critical needs ([CNN 13/11/2022](#); [Al Jazeera 16/11/2022](#)). Heating supplies in parts of Kharkiv and Kherson oblasts were unavailable as at the end of November 2022 because of severe damage to critical infrastructure, and power restoration in some parts was not possible ([OCHA 30/11/2022](#); [ECHO 02/12/2022](#)). The damage to infrastructure and continued shelling in Kherson city by Russian forces after they withdrew prompted the GoU to announce voluntary evacuations from these areas ([Al Jazeera 20/11/2022](#); [The Guardian 21/11/2022](#)). Changes in areas of control will continue to result in the disruption or complete shutdown of more power supplies and critical infrastructure, especially as they are targeted by the Russian military.

Access to running water in Mykolaiv city was disrupted again in late November after an attack damaged the main water pumping station (in Kherson oblast). The station was damaged in April, and 250,000 people in Mykolaiv city did not have running water until the station was restored in November before being damaged again within a week ([OCHA 30/11/2022](#)). Apart from damage in areas near the frontlines and under Russian control, reasons behind

disruptions to access to running water across the whole country since October include power outages and rolling blackouts.

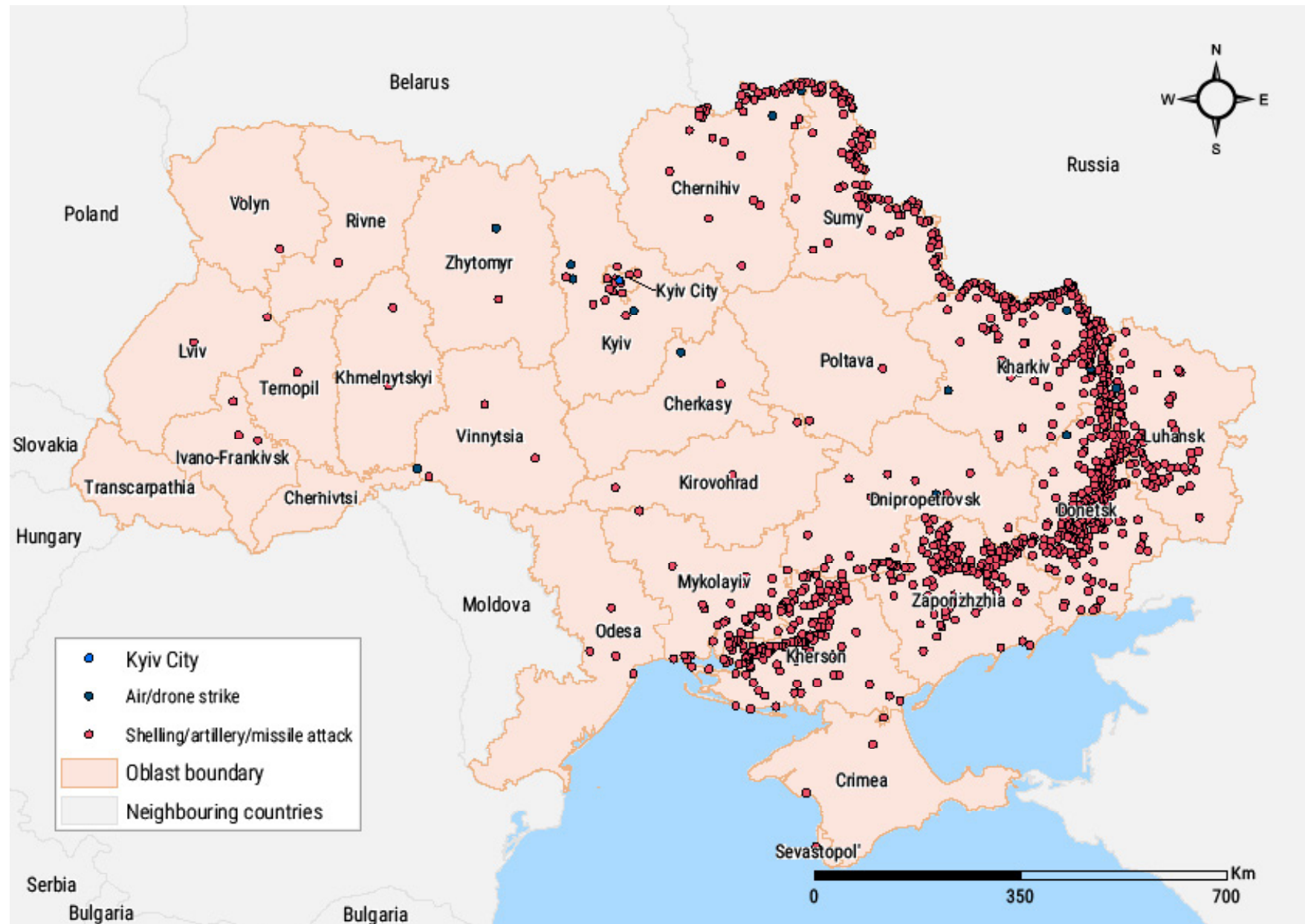
Russia's intensification of attacks on critical energy infrastructure, coinciding with the start of the cold season, has resulted in a new energy crisis ([OCHA 10/10/2022](#)). The impact of power disruptions extends beyond areas of active ground conflict and areas near the frontline to the whole country. Disrupted access to power affected up to ten million people in mid-November ([BBC 18/11/2022](#)). Urban households that install indoor wooden heaters in urban areas are at a higher risk of fire accidents, particularly if the people living there were not accustomed to using wooden heaters prior to the crisis ([CBC 30/11/2022](#)). Incidents of carbon monoxide poisoning will become more frequent as people across the country increasingly rely on portable diesel generators to counter the negative impact of power outages on daily activities and livelihoods ([Ukrainska Pravda 25/11/2022](#); [WHO 21/11/2022](#)). People collecting wood in areas affected by hostilities are at risk of injury or death from mines and unexploded ordnance, particularly in newly accessible areas and in Russian-controlled areas where demining has not been possible because of a lack of access ([DW 24/09/2022](#)).

Impact

The materialisation of this risk will have a greater impact on people living in damaged houses because the lack of proper insulation makes them much more susceptible to weather elements (rain, snow, wind, and cold). The risk is also highest for people living in areas where critical infrastructure has been severely damaged or destroyed, including health, water, and heating infrastructure, constraining or preventing access to basic and critical services on a long-term basis rather than just intermittently because of power outages ([CARE 13/12/2022](#)).

Access to frontline areas remains constrained for humanitarians because of insecurity ([NRC 23/11/2022](#); [OCHA 30/11/2022](#)). Humanitarian access to and within Russian-controlled areas remains extremely constrained, preventing people living in damaged housing with no heating from getting vital humanitarian and winterisation assistance ([NRC 23/11/2022](#)).

AIR ATTACKS IN UKRAINE BETWEEN 10 OCTOBER - 31 DECEMBER



Source: ACLED accessed 11/01/2023