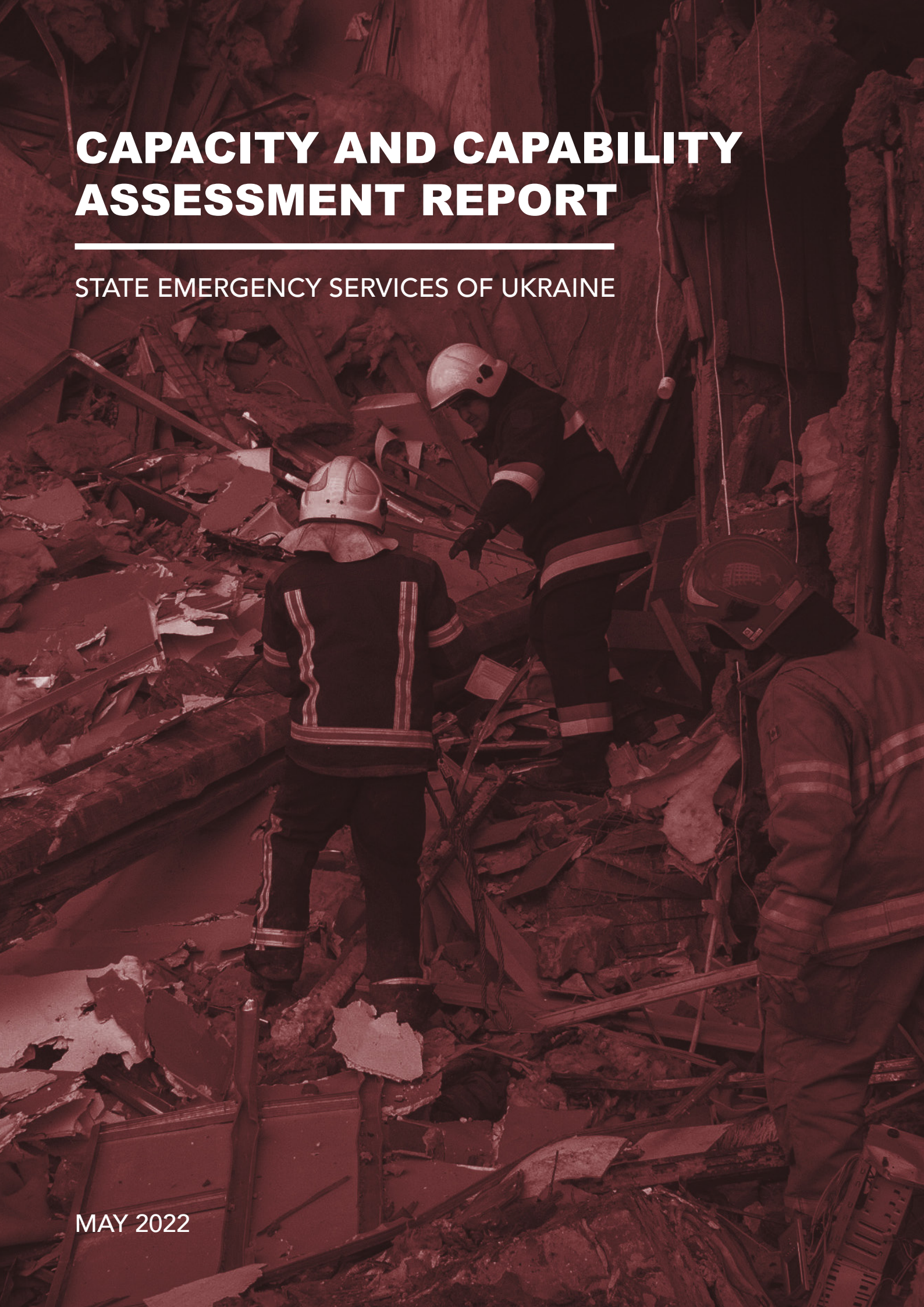
CAPACITY AND CAPABILITY ASSESSMENT REPORT

STATE EMERGENCY SERVICES OF UKRAINE



MAY 2022

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EXECUTIVE SUMMARY

The purpose of this report is to detail the capacity and capability of the State Emergency Services of Ukraine as they operate in their war-torn country as a result of the Russian invasion. SES have lost colleagues, equipment, vehicles and buildings as a result of the war. They are undertaking new and heightened responsibilities including food supply and evacuation, power generation and mental health care, in addition to their mandated capabilities. These are now more complex than ever before and may worsen as seasonal hazards combine with the threats and risk of war.

This report, and a previous equipment list and rationale, are the culmination of a five-day scoping mission conducted by emergency and disaster response professionals. The mission allowed the assessment team to engage with SES stakeholders and witness first-hand, the aftermath of the Russian attacks.

The report builds a profile of Ukraine and highlights the complexity and vastness of hazards in Ukraine, now exacerbated by the war. SES international linkages are highlighted, and a profile of the SES is provided. Findings analyse the main capabilities examined and provide a rating, a capability status and impacts of the war.

None of the capabilities fully achieve standard based on the research and investigation to date, yet there is a high standard of professionalism, dedication and ample assets to fulfil roles and responsibilities. The various voids may be attributed to a number of factors including financial hinderance, ongoing Ukrainian and Russian conflict in the east, the sheer size of Ukraine, the complexity of the hazards encountered and the current war. The implications of Covid-19 response and recovery cannot be neglected. It is recognised by team members and SES that a more in-depth analysis is required. How possible this will be in the current situation is questionable due to the workload and overburden on SES personnel and systems.

Despite understandable limitations, the team were able to connect and coordinate with key SES personnel which has continued post-visit.

ACKNOWLEDGEMENTS[1]

The Director and team from Technical Rescue International would like to pay homage and thanks to the State Emergency Services and people of Ukraine who are committed to maintaining their resilience against the Russian forces. TRI personnel were honoured to represent the PFRU governments in visiting Ukraine and felt privileged and humbled to engage with SES personnel and members of the public and government officials in liberated areas.

Sincere thanks to the local and international Chemonics team and team leader who facilitated the meetings in an extremely challenging and tight schedule but done so with the upmost professionalism and dedication. The work of the Chemonics backroom team is also greatly appreciated for facilitating rapid processing of approvals and requests.

From end-to-end, the security team and security lead from Chemonics ensured the mission was fully compliant, well researched, safe and hassle-free which was hugely appreciated.

1 Names are intentionally omitted in the acknowledgements and throughout the report.

ABBREVIATIONS AND ACRONYMS[2]

CNA	Capacity Needs Assessment
CBDRM	Community Based Disaster Risk Management
DaLA	Damage and Loss Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EMR	Emergency Medical Response
EMS	Emergency Medical Services
EOP	Emergency Operations Plan
ESF	Emergency Support Function
EWS	Early Warning System
GoU	Government of Ukraine
ICS	Incident Command System
IEMS	Integrated Emergency Management System
MHFA	Mental Health First Aid
MoU	Memorandum of Understanding
MRC	Mobile Rescue Centre
PDNA	Post Disaster Needs Assessment
PSS	Psycho Social Support
RTC	Road Traffic Collision
SESU	State Emergency Services Ukraine
SME	Subject Matter Experts
SOPs	Standard Operating Procedure(s)
TED	Training, Exercises and Drills
TNA	Training Needs Assessment
TRI	Technical Rescue International
TTX	Table Top Exercise
USAR	Urban Search and Rescue
UXO	Unexploded Ordnance

2 This list is not exhaustive. Additional agencies, acronyms and abbreviations are contained within.

DISASTER AND EMERGENCY TERMINOLOGY[3]

Capability	Ability (of a government or agency) to provide equipment and a suitable number of persons, using the resources available, to effectively deal with, or help another entity to deal with, an emergency situation or a disaster
Capacity	The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.
Competency	The specification of knowledge and skill and the application of that knowledge and skill to the standard of performance required in employment.
Crisis	A disruptive and unexpected event that threatens to harm the organization or its stakeholders.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.
Disaster Risk Governance	The system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy.
Disaster Risk Management	Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.
Disaster Risk Reduction	Preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.
Emergency	Used interchangeably with the term disaster, as, for example, in the context of biological and technological hazards or health emergencies, which can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.
Exposure	The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.

3 https://www.undrr.org/terminology

Hazard	A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.
Major Incident	An event or situation with a range of serious consequences which requires special arrangements to be implemented by one or more emergency response agency.[4]
Mitigation	The lessening or minimizing of the adverse impacts of a hazardous event.
Preparedness	The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.
Recovery	The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better"/ "build to last" to avoid or reduce future disaster risk.
Resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.
Response	Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.
Stabilisation	Activity undertaken as an initial response to violence or the immediate threat of violence[5]
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

4 https://www.jesip.org.uk/definitions
5 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784002

#	ICON	CAPABILITY
1		Urban Search & Rescue
2		Medical Response
3		Unexploded Ordnance & Demining (UXO)
4		Drones
5		Water Rescue & Flood Response
6		Damage Control & Salvage
7		Chemical, Biological, Radioactivity, Nuclear, Explosive (CBRNE)
8		Working at Height & Rope Rescue
9		Community Protection & Engagement
10		Firefighting

1. PROJECT BACKGROUND

1.1 The Partnership Fund for a Resilient Ukraine (PFRU)

The PFRU is a joint initiative of the Cabinet Ministers of Ukraine and international partners: Great Britain, Canada, Sweden, Finland, Switzerland, and the United States.

The PFRU is a multi-year, multi-donor funded programme managed by the UK's Foreign, Commonwealth and Development Office (FCDO). The aim of the PFRU is to strengthen the resilience of the Ukrainian government, economy, media and the Ukrainian civil society, by delivering essential resilience support to the relevant partners.

The PFRU has four strategic themes:

I. Government Resilience
II. Community Stabilisation
III. Strategic Communications
IV. Economic Opportunities

1.2 Early Recovery Project

In line with the thematic areas of government resilience and community stabilization, the PFRU management unit developed a concept for an Early Recovery Project. This project would support the Government of Ukraine (GoU) to realize the political dividends from the military gains from liberating areas in northern Ukraine from the invading Russian forces.

1.3 Stabilisation Phases

The process of stabilisation regularly adapts to the situational context and more recently, government institutions and thinktanks have indoctrinated resilience-building into the wider stabilisation mechanism, therefore enhancing the emphasis of civilian and military engagement and collaborative working.

The Early Recovery Project has developed a three-step process (Figure One) which acknowledges the scalability and flexibility required of the Ukraine situation. Furthermore, ongoing consultation and agreement from host stakeholders is deemed essential.

JOINT ASSESSMENT AND PLANNING

PHASE ONE – CLEAR

- Stabilisation Adviser to support the Civil-Military Stabilisation Team
- Emergency food and water rations for the civilian population in the area
- Civilian mines and UXO capabilities to support UAF
- Equipment support to Ukrainian State Emergency Service Teams
- Body bags and transport for clearance of bodies.

PHASE TWO – RECOVERY

- Support to Ukrainian State Emergency Services
- Support to re-establish Civil-Administrations in the area
- Support to Civil-Military in the coordination of humanitarian response
- Engineers to assess and declare buildings safe
- Equipment to support the clearance of rubble and other obstacles
- Develop and implement awareness campaigns In partnership with CIVIC

PHASE THREE – SUSTAIN

- Support to establish Civil-Military Administration offices
- Refurbishment to school and health facilities to re-establish service delivery
- Support to civil society organisations
- Support to private sector to re-open businesses

1.4 Scoping Missions

1.4.1 Initial Scoping Mission

An initial scoping mission in mid-April 2022 identified immediate SESU needs for liberated areas. These included:

I. SESU equipment requirements during immediate and early recovery of liberated areas
II. SESU equipment needs will vary across different geographical areas attributed to varying impacts of the invasion.
III. An estimated 740,00 hectares of land requires demining. SES is the primary agency involved in demining post-liberation and in non-occupied areas.
IV. SESU are under immense strain as seasonal risks blended with war-related hazards require constant emergency response. An example being immense summer wildfires within the Chernobyl Alienation Zone, an area which is now sporadically mined and under-resourced due to the recent occupation.

1.4.2 Joint Assessment Scoping Mission

This scoping mission took place from 2nd-7th May 2022. The joint team consisted of stabilization experts from Chemonics, and emergency and disaster management SMEs from Technical Rescue International.

The overall objective was to conduct a detailed and comprehensive national assessment of the capabilities and capacities of the State Emergency Services (SES). Importantly, the assessment would identify the new threats and requirements of the SES to respond within their existing mandate in response to the war and the impact of the Russian invasion.

The following locations were visited by the Joint Assessment Team:

I. Borodianka Hromada
II. Bucha Hromada
III. Chernihiv Hromada
IV. Dubno
V. Irpin Hromada
VI. Ivanivska Hromada
VII. Kyiinska Hromada
VIII. Kysylivska Hromada
IX. Lviv
X. Novobasanska Hromada

2. SITUATIONAL CONTEXT

2.1 Geographical

Ukraine, the second-largest country in Europe, is twice the size of Italy and slightly smaller than the state of Texas. Bordered on the south by the Black Sea and the Sea of Azov, Ukraine shares borders with the eastern European countries of Belarus, Hungary, Moldova, Poland, Romania, Russia, and Slovakia.

Most of Ukraine is flat, with mountains found only in the west (the Carpathians) or in the south of the Crimean Peninsula The country's fertile plains, called steppes, are ideal for growing crops such as barley and wheat. Ukraine is regarded as the 'breadbasket of Europe.' Ukraine is one of the largest grain exporters in the world and the world's largest producer of sunflower seeds.

The Dnieper, Ukraine's longest river and Europe's fourth-longest river, flows down from Belarus straight through the middle of Ukraine and into the Black Sea in the south.

2.2 Political

Ukraine has been embroiled in political turmoil as long as it has existed. Ancient Greeks and Romans initially colonized the coastal areas of the Black Sea followed by Slav and Viking invaders who created the largest empire in Europe, the Kyvian Rus. By the late 1700s, Russia had gained control of most of Ukraine.

In the late 19th century and the early 20th century, many Ukrainians tried to keep their culture and traditions alive. But Russia pushed back and banned the Ukrainian language in print and in public. By 1922, Ukraine was part of the newly formed Soviet Union. During World War II in the 1940s, Ukraine was invaded by Germany. German forces enslaved millions of Ukrainians and murdered some hundreds of thousands of Ukrainian Jews. In 1944, Germans were driven out of Ukraine by the Soviets.

After the Soviet Union dissolved in 1991, Ukraine declared its independence and elected the country's first president. Several Presidents took office over the year, with many appointments' concomitant with controversy. Viktor Yanukovych was elected president in 2004 and again in 2010. After discontent due to his pro-Russian rhetoric, the Maidan Revolution ousted Yanukovych and the pro-Kremlin government. This coincided with the Russian annexation of Crimea in 2014 and continued fighting along the eastern border.

On 24th February 2022, Russia invaded Ukraine, attacking cities and regions from the sea, air and land. The war has continued impacting millions of citizens and their livelihoods. The 2019-elected President, Volodymyr Zelensky, has led the country in standing-up to the Russian adversity with the full support of many Western countries. The war and ingrained, emboldened resilience of the Ukrainian people continues.

2.3 Risk Profile

The destructive impact of natural and unnatural hazards in Ukraine is burgeoning according to the State Emergency Service of Ukraine (SESU). Losses from hazards increased by more than six times in 2020 compared to 2019. The majority of this increase was attributed to drought in the south, wildfires in the north and the east, and flash floods in the country's western regions.

Unfortunately, Ukraine is well acquainted to hazards and risks. In 1932, at least seven million people perished in a human-induced famine during Stalin's collectivization campaign. From 1941-44, Ukraine suffered devastating wartime damage and destruction as a result of Nazi occupation[6].

In 1986, a reactor at the Chernobyl nuclear power station exploded, sending a radioactive plume across Europe and mass evacuation in the Pripyat area. The financial cost was estimated at US$68 billion, just under 100 lives were lost and over 500,000 personnel were involved in the response, recovery and decontamination.

The various conflicts have induced new, and exacerbated existential hazards and risks in Ukraine.

2.4 Natural Hazards

Natural Hazards in Ukraine consist of flooding, wildfire, earthquake and severe winter storms.

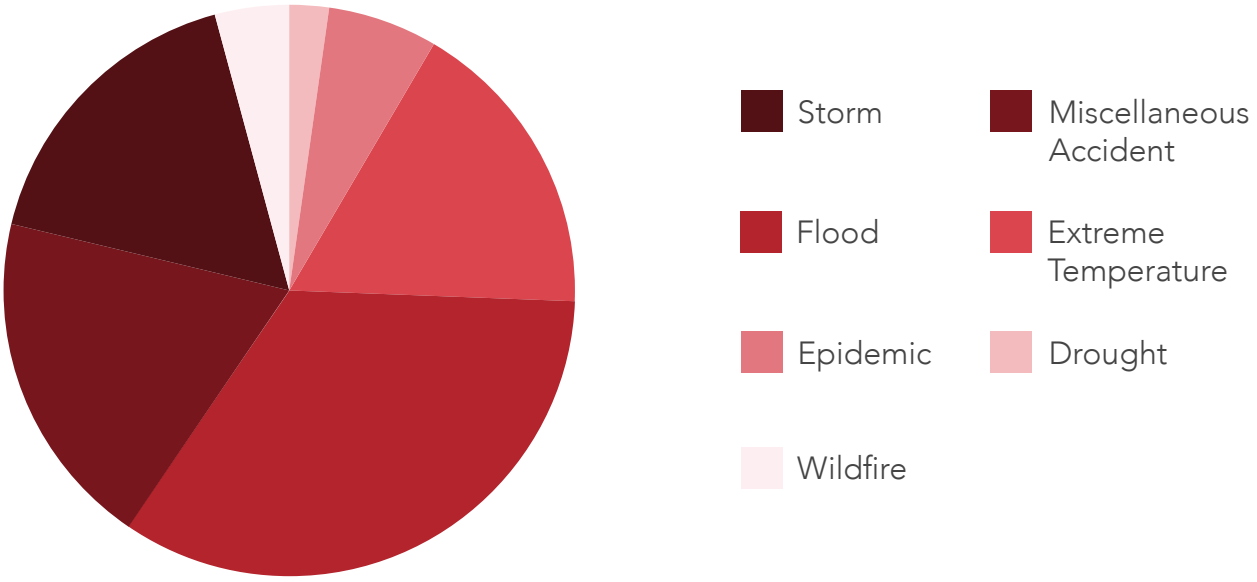


Figure 1. Average Annual Natural Hazard Occurrence, 1980-2020[7]

6 https://www.bbc.co.uk/news/world-europe-53233387
7 https://www.gfdrr.org/en/publication/disaster-risk-profile-ukraine

2.4.1 Flooding

Due to its extensive network of rivers, Ukraine has always succumbed to the impacts of flooding. However, floods, and in particular flash floods, have intensified over the last decade. In July 2020, some of the worst floods in Ukraine were witnessed in western Ukraine. Rivers rose to three metres and devastated roads, bridges, dams and other critical infrastructure. It is estimated that floods in Ukraine affect approximately 600,000 citizens and negates the GDP USD$1 billion annually.

According to a UNDP report[8], 1.8 million hectares of the territory of Ukraine will be flooded by 2100 if the overall temperature on the planet increases by four degrees Celsius. Under such conditions, an estimated 75,000 people in the affected areas could become climate refugees.

Figure 2. SESU responders evacuating residents in Lanchyn, western Ukraine (SESU, 2020).

Coastal surge

Research[9] illustrates that sea level rise driven by climate change could seriously affect the Ukrainian coastal areas. Coastal territories in the South of Ukraine will suffer intensive impacts. The calculations performed suggest that territories with an area of approximately 1.5 m hectares and up to 1.8 m hectares if sea surge effects are taken into account, will be flooded by 2100.

8 https://www.undp.org/sites/g/files/zskgke326/files/migration/ua/Strengthening-resilience-to-natural-disasters.pdf
9 https://en.ecoaction.org.ua/wp-content/uploads/2019/04/water-is-coming-eng-short.pdf

Crimea, the Kherson Region, and the Odesa Region will be affected the most. Climate change and the resulting sea level rise are problems that now require active actions at all levels – international, national, and local. This concurs with The Paris Agreement, as ratified by Ukraine in 2016.

Perceived climate change has changed weather patterns resulting in longer summers, torrential and sustained rain, raging wildfires and stronger winds. The effects of climate change cannot be held fully accountable; urbanisation, deforestation and large-scale logging, specifically in the Carpathian areas, are all contributing factors in both rural and urban areas.

With flooding as a primary hazard, second-order impacts can also be detrimental. These include water-borne disease outbreak, building collapse, mudflow, landslide and civilian displacement. This stresses the requirement for an 'All/ Multiple Hazards Approach' to emergency response and disaster management.

2.4.2 Earthquake

Seismic risk in Ukraine is prevalent around the Crimean Peninsula (Krym Oblast), Chernihiv, Sumy, Zaporiz and Vinnyts regions. The high seismic activity is related to fires in the undercrust of Ukraine's surface, as opposed to significant fault lines.[10] Ukraine's worst earthquake took place in 1927 resulting in a magnitude of 6.8 and 15 fatalities. Damage was estimated at USD$200 million.

Ukraine's Main Centre of Special Monitoring (MCSM) accounts for six seismic monitors and reports geophysical readings to a National Data Centre. Although a 'Seismic Safety' campaign was introduced some time ago, this was not sustained. Furthermore, infrastructure and building regulations do not adhere to seismicity related guidelines and/ or regulations.[11]

2.4.3 Wildfire

Fires in rural, forested or mountain areas are the constantly the topic of debate regarding their hazard typography. An argument exists for the natural aspect while another broaches human induced causation as a result of arson or fire carelessness.

Regardless of typology, wildfires pose a significant hazard to Ukraine's environment, infrastructure, response resources and economy.[12] The Global Wildfire Information System (GWIS) reports fires are more frequent and intense thus burning more land cover and threatening previously safe areas.

It would be remiss not to report on the wildfire threat in the Chernobyl Alienated Zone. In 2020, fires burned for two weeks and reports state radiation levels were 16 times above normal. Over 400 SESU personnel, 100 vehicles and helicopters helped extinguish the blazes covering 11.5 thousand hectares.

10 http://wdc.org.ua/en/node/193
11 https://www.iitk.ac.in/nicee/wcee/article/WCEE2012_2176.pdf
12 https://gwis.jrc.ec.europa.eu/apps/country.profile/chartsba

Forest fires erupt around Chernobyl nuclear plant in Ukraine

Ukrainian authorities say Russian control of plant is hampering efforts to control the blazes

Figure 3. The Guardian headline, 22.03.22.

The secondary hazard of wildfires is the thick smog that can lead to environmental and air pollution, Ukraine's industries reportedly produced significant emissions pre-conflict. The atmospheric damage caused by fire gases and smoke products is extremely debilitating to flora and fauna including soil and water tables.

Figure 4. Chernobyl wildfires, April 2020. (Getty Images).

2.4.4 Severe Heat and Drought Risk

The Carpathian Region and the Mediterranean area are the two European hotspots showing a drought frequency, duration, and severity increase in the past decades and in particular from 1990 onwards.[13] When drought effects are exacerbated by heat waves or vice versa, such combination may cause devastating effects, as happened in summer 2003 in Central Europe with a catastrophic 30,000 fatalities.

During 1951-2011, most of the heat wave episodes in Ukraine occurred at monitoring stations located in Eastern Ukraine (in this case heat waves being defined as periods of more than 5 consecutive days with daily maximum air temperature ≥5 °C above the mean daily maximum air temperature). The number of heat wave episodes was highest for almost all stations in the decade 2001–2010. For many stations, the longest heat wave duration occurred in the first two decades of August 2010, i.e., in the period of the extremely severe heat wave in Western Russia.

According to Ukraine's Central Geophysical Observatory, 2019 was the warmest year on record in the Ukrainian capital Kyiv. The yearly average temperature was as much as 2.9 degrees Celsius higher than historic averages, while every single month was warmer than normal. In total, 36 temperature records were broken in 2019. Perhaps most strikingly, the temperature in December exceeded 15 degrees Celsius for the first time. This rise in temperatures means that the Kyiv climate is now close to that of Odesa in the nineteenth century.

Warmer winters are only one aspect of the changes taking place in the Ukrainian climate. Other features that are becoming more frequent in today's Ukraine include extreme weather events, heatwaves, and the mounting issue of water scarcity. This has the potential to disrupt lives and cause significant damage to the Ukrainian economy, particularly given the strategic importance of Ukraine's booming agricultural sector.

Water supply is one of the most crucial aspects of climate change in Ukraine. Freshwater reserves are in decline and expected to grow even scarcer in the coming years as droughts become more frequent. In 2019, the country saw 25% less precipitation than average, while the incidence of droughts has nearly doubled in the last 20 years. At the same time, the absence of a seasonal snow cover in much of Ukraine poses threats to winter crops and therefore the grain industry and national economy.

13 Christenson et al. (2007), in: Met. Office Hadley Centre (2010).

2.5 Human-Induced/ Technological Hazards

2.5.1 Nuclear Power Plants

On April 26, 1986, the Number Four reactor at the nuclear power plant at Chernobyl, Ukraine, went out of control during a test at low power, leading to an explosion and fire that demolished the reactor building and released large amounts of radiation into the atmosphere. Safety measures were ignored, the uranium fuel in the reactor overheated and melted through the protective barriers.

Despite many reports, the risk from the shut-down facility is low. Further dismantling and remaining fuel rod transfer continues, it is within these fuel rods that some risk remains. Cool water is required to maintain the rods at a safe temperature, and this requires a steady supply of electricity. If the water evaporated with cesium 137, a radioactive material, a major evacuation would be required. Maintaining a steady electrical supply is key and avoiding fire damage is essential- should that be wildfire or Russian weapons.

Figure 5. Nuclear Power Plants in Ukraine.[14]

Ukraine has four active nuclear power stations including the largest in Europe, Zaporizhzhia. This plant recently experienced occupation after being shelled on March 4th and although the fires were contained, the threat of damage to the plant was real. Aside from the risk of radiation exposure to the population and environment, a technological risk prevails as the plant powers millions of homes and industries. Currently, Russian occupiers desire for the plant to be connected to the Russian electricity grid as Ukrainian workers continue to operate the plant.

14 International Atomic Energy Agency (2022).

2.5.2 Transport Incidents

With 172,400 km (107,100 miles) of roads, multiple airports, seaports and an extensive rail network, Ukraine relies on the capability of the SESU for response to transport-related emergency incidents.

Approximately 1.35 million people are killed on roadways each year. In 2020 Ukraine had the fourth highest road crash fatality rate in Europe.[15] There were 168,107 road crashes resulting in 3,541 fatalities and 31,974 injuries. This has an estimated defecit 2.7% on GDP. These figures also relate to a sustained period of less road use due to Covid-19.

The SESU are the primary first responders for post-crash rescue and are equipped and trained to do so. Interestingly, data in relation to first response and trauma registry in relation to RTC was unavailable highlighting a potential void in incident reporting.

2.5.3 Fire

Fire is a major hazard for SESU personnel and ranges from residential to industrial hazards, the latter which may involve hazardous materials. A review of global fire statistics reveals that Ukraine has an extremely low level of civil protection against fires. The number of fire deaths in Ukraine is almost 18 times higher than the average for EU Member States.[16]

In general, this is also true for other post-Soviet states, which share almost identical mechanisms of fire registration and fire services calls as well as the protection level of buildings in terms of automatic fire detection and firefighting systems. Data from the SESU is collated by the International Association of Fire and Rescue Services.[17] Relevant data is illustrated in the below tables.

Ukraine global ranking 2019 (/34 countries)	Number of call outs	Number of fires	Number of fire deaths	Number of fire injuries
10	269,160	96,812	1909	1523

Ukraine global ranking 2019 (/34 countries)	Number of residential fires	Number of other fires	Number of vehicle fires	Number of other fires (excl. wildfire)
5	30,565	2,638	4,451	56,149

15 World Bank, Road Safety Country Profile—Ukraine, 2021.
16 Review of Fire Statistics (Borys Pavlovych, 2017).
17 https://ctif.org/sites/default/files/2021-06/CTIF_Report26.pdf

Alarmingly, Ukraine ranked third in the world for residential fire deaths in 2019 from 16 countries that submitted data. Additionally, over a five-year period, SESU callouts increased from 194,764 in 2015 to 269,160. The 1,903 average of fire fatalities has not decreased over that period.

Firefighter deaths have averaged 2.0 over the same five-year period.

2.5.4 Hydroelectric Power Stations and Dams

There are 1103 reservoirs in Ukraine with a total water volume of about 55,500 million m^3. Although dam safety monitoring systems are partially in place across Ukraine, there have been multiple incidents around the globe where structurally sound dams have fragmented or partially collapsed.

Populations, infrastructure and the natural environment in these areas are at risk. The potential danger and risks to the population living near reservoirs especially downstream may be no less than to people living near nuclear facilities or chemical plants, with which experts and the public usually associate problems of technogenic safety. Moreover, statistics show that about a third of all accidents on dams and levees occurred due to overflow of reservoirs when upstream water levels exceeded allowable values.

A recent study of the Kyiv reservoir overflow predicted a safe hypothesis for the population and infrastructure.[18] However, the research also referenced the inherent dam and reservoir risks within the country.

2.5.6 Mining

Mining in Ukraine was estimated to produce USD$15.3 billion, ranking Ukraine as one of the top ten mining countries globally, especially for coal. There are approximately 1,300 mines in Ukraine with the Donets basin being one of the most prevalent. Mining is a hazardous industry and many accidents relating to transport, confined space, earth collapse and industrial tailings (post-processed remnants) are frequent.

Fatal accidents are relatively common in coal mines in eastern Ukraine, often caused by dilapidated infrastructure or violations of safety regulations. In 2015, a gas explosion killed up to 30 (various reports) in the Zasyadko coal mine. In 2019, a fire killed 17 people in the Luhansk region, while another similar accident claimed the lives of 33 miners in the Donetsk region in 2015.

At this time, it is unclear if a previous Mines Rescue Service or other entity remains operational in any of these occupied regions.

18 Probability assessment of the Kyiv reservoir overflow (Stefanyshyn, 2022).

2.5.7 Impacts of War in Ukraine

According to the United Nations[19], more than eleven million people have left their homes in Ukraine so far, 5.3 million of which have left to neighbouring countries, while 6.5 million people are now internally displaced in the country itself amidst the continuation of the war. The UN's children agency (UNICEF) believes that two-thirds of all Ukrainian children have been impacted and have had to flee their homes.

Since the war started, half of all Ukrainians have lost their jobs. Only 2% were able to find temporary earnings. Those that have left for other countries are willing to return home once it is safe to do so.

Due to the current situation, Ukraine is facing a food crisis in several cities, such as Mariupol, with limited to no possibility to bring in more supplies. This food crisis is a part of the bigger economic war that the invasion into Ukraine has triggered. The problem will not be limited to Ukraine, but also hit other Eastern European countries hard, as prices surge in the short-term and shortages will increase in the long run.

Scarily, Ukraine's natural environment will also suffer intense hardship. Rubizhne's (Luhansk Oblast) nitric-acid tank strike and Chernobyl are just a snapshot of the environmental impacts of Russia's war on Ukraine. Although a humanitarian catastrophe has been caused, its ecological consequences are pertinent—and research shows the Ukrainian people will bear the cost.

There have been at least 36 attacks on fossil fuel infrastructure, 29 attacks on electricity stations, seven attacks on water supplies, and six attacks on nuclear facilities. After an attack on the Sumykhimprom chemical plant in northern Ukraine, ammonia began leaking until it covered an area with a radius of 2.5 kilometers, threatening nearby communities by contaminating groundwater supplies, the soil, and wildlife.

Forest fires caused by missiles near the Chernobyl nuclear facility have caused radioactive material to enter the atmosphere. Rockets fired by Russian soldiers at the Zaporizhzhia nuclear power plant nearly caused a nuclear disaster. Oil and gas facilities in Kharkiv have come under heavy fire since the war began, disrupting Ukraine's energy supply, and releasing enormous amounts of greenhouse gas emissions and other contaminants into the atmosphere that make it difficult to breathe.

Each day brings new reports of the Russian military destroying Ukraine's environment with thermobaric bombs and other powerful weapons. Some cities, like Mariupol, have become so heavily bombarded that they are now unlivable, due to both a lack of infrastructure and extreme toxicity in the environment.

Wildlife refuges are being targeted and zoos have been attacked. Approximately, 44% of the

19 https://data2.unhcr.org/en/situations/ukraine

country's most vulnerable environmental areas are in active war zones, with bombs causing significant harm to various ecosystems. Russia's tactics in Syria of crop destruction, intentional reservoir bombing, and indiscriminate bombing rehearsals destroyed plains, hillsides and agricultural areas.

All of the above-mentioned places immense strain on the country's public sector and voluntary services and for the majority of the hazards and risks within this profile, the State Emergency Services of Ukraine will be at the forefront of preparedness, response, relief and recovery.

Figure 6. Al Jazeera headline on 26th May.

3. THE STATE EMERGENCY SERVICES OF UKRAINE

3.1 Organisational and Operational Overview

'To Prevent, To Rescue, To Help'

The SESU is the main executive agency tasked with carrying out state policy in the spheres of civil defence, firefighting, search and rescue, radioactive incidents and hazardous materials, civilian protection and any other similar tasks.

Figure 7. SESU emblem.

The SESU is administered by the Ministry of Internal Affairs and was created in 1996 as a merger of the state civil defence and the ministry in charge of protecting the Chernobyl Alienation Zone, then known as the Ministry of Emergencies of Ukraine. After an administrative reform in 2010, three executive powers were commissioned to a newly formed and named SESU:

I. State service of mining supervision and industrial safety
II. State agency to manage the Chernobyl Alienation Zone
III. State inspection of technogenic safety of Ukraine

The SESU is led by a Head and four Deputy Heads spanning four strategic departments. A full organisational structure is unavailable but it is confirmed that the SESU has multiple directorates and divisions including:

- Department for Emergency Prevention
- Department for Emergency Response
- Department for Organization of Civil Protection Measures
- Department for Economics and Finance
- Department for Resources Supply
- Administrative Department
- Division for Aviation, Aviation Search and Rescue
- Hydrometeorology Division
- Legal Division
- Division for European Integration and International Cooperation
- Internal Audit Unit
- Media Relations and Public Communication Unit
- Internal Security and Anti-Corruption Unit
- Central Medical Expert Commission

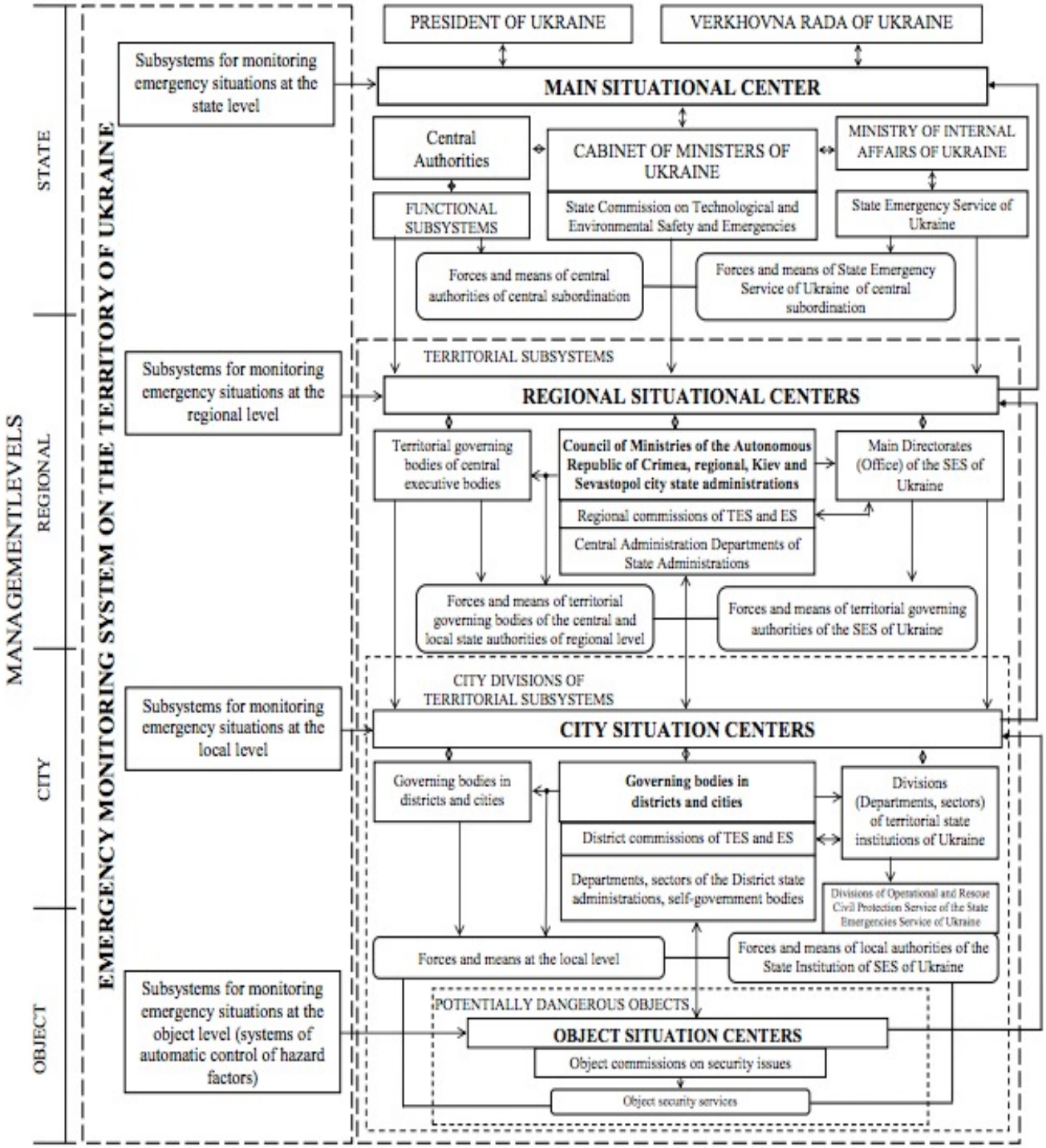


Figure 8. State Emergency Services emergency monitoring system.[20]

20 Department of Management and Organization of Civil Protection National University of Civil Protection Ukraine. Kharkov, Ukraine

3.2 SES Vital Statistics

- 63,500 full-time employees in the State Emergency Service of Ukraine.
- Aprroximately 11.5% are female staff
- Aprroximately 2,000 volunteer firefighters
- Additional 10,000 volunteers since war commenced
- 61 State Fire Rescue Stations (SFRS) and
- 2 special purpose divisions (Mobile Rescue Centre and Maintenance Service Station) Are in Kyiv region.

After the start of a full-scale war with Russia

- 4 State Emergency Service of Ukraine in Kyiv region were killed
- 22 employees were wounded
- One missing.

Significant Damage to SES fire stations and buildings - 14

ESTIMATED COST OF WAR FOR SES

Approx. GBP £1.95 million since 24th February

3.3 Global Framework

3.3.1 Strengthening Disaster Risk Reduction in Ukraine (United Nations Development Programme)

Heavy rainfalls in June 2020 caused severe damage in five regions of western Ukraine: Chernivtsi, Zakarpattia, Ivano-Frankivsk, Lviv and Ternopil oblasts. The flash floods during this period have resulted in multiple human injuries and fatalities, extensive destruction and damage to housing and social infrastructure facilities.

From August 2020- September 2022, UNDP is implementing a DRR project which works with the State Emergency Service of Ukraine and with the country's Carpathian region communities in developing strategies and plans for flood risk management and strengthening local early warning systems to achieve better preparedness. Support is also provided to Ukraine in developing legislation on climate risk financing, and in preventing open burning practices – which often cause wildfires.

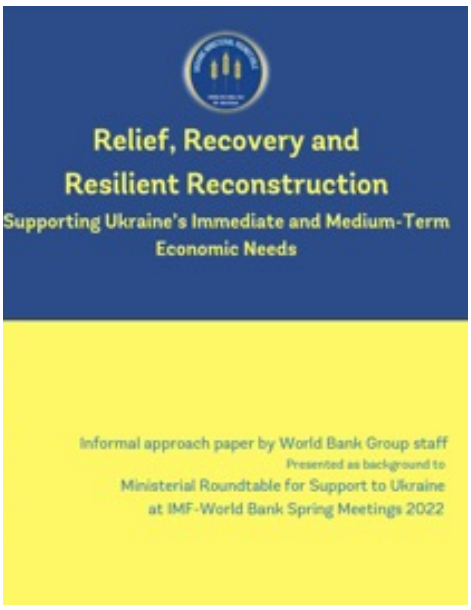
Total Funding: USD$324,682

3.3.2 World Bank Group and Global Facility for Disaster Risk Reduction (GFDRR)

In 2017, the GFDRR carried out a risk profile of Ukraine, mainly focused on the impacts of climate change. At present, there has not been follow-up of disaster risk interventions, possibly attributed to the excessive focus on the Russian invasions and war.

It is not confirmed if any World Bank funding will assist SES directly as part of the recent Relief, Recovery and Resilient Reconstruction proposal. Plans are proposed for a broad resilience approach which may incorporate SES.

Total Funding: USD$925 million[21]



3.3.3 Prevention, Preparedness and Response to natural and manmade disasters in Eastern Partnership countries PPRD East (European Commission, DG ECHO)

Initially commenced in 2010, PPRD East is a three-phase project (this phase, 2020-2024) comprising the countries of Ukraine, Moldova, Belarus, Armenia, Georgia and Azerbaijan. The overall objective is to increase the resilience of countries to natural and human-induced disasters in the Eastern Partner Countries. Capacity building, training and exercising, and exchange of experts are the main components of the project.

The project relocated their operating base from Kyiv to Tbilisi, Georgia in March 2022.

Total Funding (Phase Three): Euro €6 million

3.3.4 3P (Prepare, Prevent, Protect) Consortium on Disaster Risk Reduction for Eastern Ukraine (US Bureau of Humanitarian Affairs)

The consortium of three NGOs aims to target 45 organizations, 6,348 individuals directly and 216,000 people indirectly. Modalities include development of local Disaster Risk Management plans; conducting Area Based-Risk-Assessments; wildfire risk analysis; Water Risk Assessments; preparing Water and Sanitation Safety Plans; designing of a mobile application for increased risk awareness; conducting public awareness campaigns and more than 50 trainings/ sessions and desk studies;all with the overarching aim to further promote, raise awareness of, and improve

21 As of 22nd March 2022

disaster risk management in Ukraine and support the Government of Ukraine in fulfilling its commitments under the Sendai Framework for Disaster Risk Reduction.

Total Funding 2021-2023: Unavailable

Although some disaster risk projects were in existence in Ukraine, the sustainability and direct impact on SESU capacity and capability are limited.

3.4 UN Peacebuilding and Recovery Programme 2021

The United Nations Development Programme (UNDP) has organized a series of training sessions for rescuers working in Donetsk, Luhansk and Zaporizhzhia oblasts on how to use the 'what3words'[22] geo-locating application.

These were short familiarisation sessions, and it is understood that SES are not rolling out the use of the application on a national basis.

Total Funding 2021: < Euro €2,500

3.5 International Donations

There has been an outpouring of donated finance, equipment, vehicles and resources from multiple countries across the globe. SESU have bolstered their international cooperation team by deploying personnel to Lviv mainly and have even relocated the Mobile Rescue Team to the SES faculty at the Lviv State University of Life Safety.

To date there have been three considerable deployments of donated equipment from the UK; which TRI personnel are acquainted with. There has been a vast amount of provided equipment from international fire & rescue services since the start of the war. The donated equipment is coordinated from the various borders and redeployed via hubs across Ukraine. Equipment is checked and processed by SES teams to ensure it is specific to its final location.

These donations are extremely well-received and appreciated by SES and it undoubtedly raises moral in combination with enhancing capabilities. However, should the war continue, a viable and sustainable model of equipment replenishment and associated training must be considered.

22 https://what3words.com

3.6 SES and Global Frameworks

3.6.1 International Civil Defence Organisation (ICDO)

The International Civil Defence Organization (ICDO) is an inter-governmental organization whose objective is to contribute to the development of ensuring the protection and assistance of populations and safe-guarding property and the environment in the face of natural and man-made disasters. These structures are generally known as civil protection, civil defence, civil safety and are all concerned with the management of emergency situations. The ICDO federates the national structures established by States for this purpose with the aim of favouring cooperation and mutual solidarity.

Ukraine holds Observer status in the ICDO. This status does not offer all the privileges of full State Membership. An Observer may participate in all ICDO activities and will be invited to sessions of the General Assembly, without right of vote. The status of Observer is reviewed every two years by the General Assembly and maintained to the extent in which the State thus benefitting shows its interest in the activities and programmes of the Organisation.

3.6.2 Sendai Framework for Disaster Risk Reduction (SF)

The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) was the first major agreement of the post-2015 development agenda and provides Member States with concrete actions to protect development gains from the risk of disaster. The Sendai Framework works hand in hand with the other 2030 Agenda agreements, including The Paris Agreement on Climate Change, The Addis Ababa Action Agenda on Financing for Development, the New Urban Agenda, and ultimately the Sustainable Development Goals.

The SF advocates for substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries. It recognizes that the State has the primary role to reduce disaster risk, but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

Ukraine is a signed-up State for the Sendai Framework and the SES is the appointed focal agency for Sendai monitoring and reporting. The latest available report is 2017.[23]

23 https://www.preventionweb.net/files/53205_ukraineukr.pdf

4. METHODOLOGY

4.1 Design

Methodology research and design was based on the requirements of two deliverables:

I. Priority Equipment List
II. Capacity and Capability Report

To gather information for both it was imperative for a scoping mission to take place. There is limited empirical or Ukrainian emergency services specific research available and establishing stakeholder connections would only be resultant of in-country engagement.

4.2 Desk-based research

The majority of desk-based research (contained within this report) was carried out in developing the overall risk profile of Ukraine. This research phase assisted the design and development of the data-collection tool.

4.3 Data collection methods

On receiving the schedule of meetings for the scoping mission, it was seen as a requirement that additional SESU meetings would be required. Given the nature of their work and the added pressure of the war, it was difficult for SES personnel to commit to lengthy meetings and interviews. This was fully understandable.

The data-collection methodology consisted of:

4.3.1 A tablet-based, facilitated questionnaire using KoBoCollect (Annex A).

KoBoCollect is the collection tool used within the KoBoToolbox secure data management platform. It facilitates the collection of field data using mobile devices such as 'phones or tablets, as well as laptops and hard copies. A Samsung Active 7 was the device used for data input.

A standardised survey or assessment to conduct a capacity or capability assessment for emergency services does not exist. Questionnaire design was based on technical expertise and previous experience of similar projects including elements of the previously conducted World Bank Ready2Respond diagnostic and UN World Food Program Emergency Management Capacity Index tool. The questionnaire was made available in English and Ukrainian.

The SESU tool was categorised into key areas including:

A. Respondent details
B. Organisational governance and strategy
C. Early warning systems
D. Community engagement
E. Management information systems

F. Organisational structure, training and functions
G. Incident Command System
H. Emergency operation centres
I. Logistics and supply chain
J. Capabilities' assessment
K. Volunteers and voluntary agencies.

4.3.2 Focus Group Discussions with SESU personnel

The TRI team were able to engage with SESU personnel from operational stations in Kyiv city centre, Irpin and Chernihiv. This included a visit to firefighting stations and flood response/ water rescue stations.

Although there was not time for a full diagnostic using the tool in the field, the categories were used as a base for questions and information gathering.

4.3.3 Meetings with key SESU personnel

Key meetings took place in Kyiv, Dubno and Lviv to meet with key personnel from SESU. In Kyiv, the team met with members of the SESU international coordination team and met the head of this team in Dubno. At Lviv State University of Life Safety, the team met with the head of the Mobile Rescue Centre- the technical rescue and response team who are normally based in Kyiv.

As with previous engagements, the KoBo Collect tool was used to formulate the basis for team discussions. The engagements in Dubno and Lviv were instrumental to the scoping mission and have facilitated ongoing discussion and coordination.

4.4 Safeguarding

TRI implements a general safeguarding policy, and a contextual assessment is applied prior to and when undertaking assignments. A strict 'Do No Harm' approach is applied. For this project the following components of safeguarding were:

I. Safety and security of TRI personnel, PFRU team, respondents and other sources when dealing with sensitive information and how to manage certain scenarios.

II. Safeguarding efforts focused on gender equality, young people, vulnerable populations (including citizens under duress), social protection and inclusion.

III. Respondents were fully informed digitally and verbally (Annex A) that they could opt out of the questionnaire or particular questions at any time.

IV. In line with TRI PSEA safeguarding, for female respondents and engagement, at least one other female was always present, and the necessary facilities were in place.

V. The team had expected ad-hoc visits and made the decision that if a split was required, there would be no lone working which did not include the security team.

VI. Only essential travel was undertaken by air and road with personnel travelling in two vehicles as opposed to the initial three.

VII. Data-collection was conducted digitally to minimise environmental impact.

VIII. Safeguarding updates were provided in briefs and debriefs, especially prior to and after dealing with members of the public in war-damaged areas.

IX. As images were an important part of the information gathering process, TRI personnel followed strict guidelines. Any image taking was discussed with the project director before asking permission. Any requests were directed through the interpreter to ensure nothing was lost in translation. This was followed up with a reassurance of confidentiality and showing of the image.

5. RESULTS AND FINDINGS

All initial assessments and ratings are based on SES capability without the additional hazards of invasion, war and occupation; however, these will all be accounted for within the capability narrative.

Given the incredible workload of SESU, especially with strategic officers, it was difficult to acquire a complete appraisal of their previous and current status across the capabilities. Through targeted visits, discussions and meetings, the scoping team has managed to collate relevant and current information which is exhibited in a similar structure for each capability:

1. A brief description of each capability is provided.
2. Each capability is assessed based on the proposed rating scale:

1 Parameter is not achieved: There is no evidence of the required elements that need to be in place nor are there ongoiing initiative that would change this. Answer is no to all the guiding questions.

2 Parameter is partially achieved: Some efforts to achieve the criteria are observed, although they are inconsistent. Additional work is planned and/ or being implemented to ensure consistency.

3 Paramete is achieved: There is consistent evidence that the criteria have been successfully reached.

3. An assessment of SES capability is provided.
4. A description of the impacts of war on the SES capability is provided.
5. Cost of priority equipment provision.

5.1 Urban Search and Rescue (USAR)

5.1.1 Capability Description

USAR is the systematic process of conducting search and rescue operations, normally as a result of building collapse. USAR invokes internationally acknowledged systems of work using specialist equipment and techniques.

5.1.2 Capability Rating

2 Capability is partially achieved

5.1.3 SES USAR Capability

The SES capability for USAR is extremely limited in both equipment, knowledge and skill. An international common standard which has been proven over several decades, is for all firefighters to have a basic level of USAR training and equipment. This will facilitate the initial assessment, hazard identification, surface search and identification of specific and viable live rescue sites of a collapsed structure. On achievement of the initial phase- USAR first response, a handover is provided to an oncoming specialist team. This team will be comprehensively trained and equipped to carry out the full search and rescue to identify, locate and rescue any heavily trapped or deeply entombed survivors. At this stage, SES does not have a full capability for achieving this standard.

In general, SES firefighters have no specific training in USAR techniques and have very limited equipment which excludes devices specifically for search such as search cameras or listening devices; both of which can detect casualties, not normally seen visually.

There is however, one USAR trained team which is the Mobile Rescue Center (MRC), based in Kyiv. The MRC in 2014, underwent intensive field exercises in order to be classified as a heavy rescue team under the International Search & Rescue Advisory Group guidelines. INSARAG members are part of a worldwide knowledge-sharing network on collapsed structure rescue and operational field coordination. Accredited INSARAG[24] teams as such deploy internationally to disasters, most commonly earthquakes. There has never been a response for conflict scenarios.

Although fully trained and equipped to deal with the full range of USAR disciplines (Assessment, Search, Shoring, Lifting & Moving and Breaching & Breaking), they are only one team and only able to deploy an average of 20 responders at any one time. The team's focus has been on the hromadas surrounding Kyiv.

There has been some international support providing guidance and offers of USAR equipment, yet nothing has been formalised. A Canadian NGO, Canadian International Rescue Organisation (CIRO) had been in Ukraine assisting early USAR efforts in March. They were required to depart but kindly left their search equipment including cameras and listening devices. Unfortunately,

24 www.insarag.org

these are quite technical and CIRO did not have the time to train SES therefore the equipment is not used at this time.

5.1.4 Impacts of War

Firefighters, who will be first on scene in occupied areas, will be confronted by many collapsed structures with casualties whose lives could be saved with a minimal amount of training and equipment. In Syria, it was quickly learned that training for hasty yet, systematic physical search post-risk assessment was extremely beneficial for USAR first responders.

USAR is designed for building collapse, regardless if that collapse is from a weapon of war, an earthquake or a landslide. Unlike the natural or geophysical hazard, war presents additional risks after the initial strike. Rescuers may be faced with additional intensified fires, threats of attack, damage to equipment and vehicles, unexploded ordnance. Responder safety is paramount and is a module that must be inbuilt to USAR response training, incorporating additional PPE such as armour-plated vests and helmets. Resources become strained as personnel are required to become spotters, safety officers and evacuation leaders in addition to responders.

The only specifically trained and equipped SES USAR resources number 20, which considering the amount of collapsed or partially collapsed structures due to the invasion is miniscule. As they have been working in the Kyiv Oblast area, other areas will not have the benefit of a trained or equipped USAR team. For occupied areas, there will be immediate benefit in providing first response USAR equipment and training where possible- either physical or virtual.

Not having trained and equipped teams' available means that firefighters and casualties will be exposed to further risk. For example, the capability allows for a wall to be shored, a concrete slab to be lifted or concrete to be breached to gain access to a casualty. Without such a capability they will remain in place for much longer with more severe consequences.

USAR equipment and techniques also assist in other capabilities. These include rescue from various types of transport incidents, salvage and damage control, restoration of utilities and firefighting incidents where the structural integrity of buildings is compromised.

5.1.5 Cost of USAR Priority Equipment

GBP £2,600,099.59.

Figure 9. CIRO member using the Delsar listening device in Kyiv.

5.2 Rescue Medical

5.2.1 Capability Description

Rescue Medical is providing emergency response trauma care to civilians, SES personnel and other responders at the scene of an incident. It requires specialist equipment, much of which is tailored to the operating environment. Medical intervention at the rescue site is an essentiality of successful pre-hospital life support.

5.2.2 Capability Rating

1 Capability is not achieved

5.2.3 SES Rescue Medical Capability

At present, firefighters have very limited medical training. That which is provided, is not standardised or accredited and provided on an ad-hoc basis. Equipment is extremely limited, and it is not standardised throughout SES operational bases and fire stations. This leaves a major gap in the SES ability to facilitate immediate lifesaving interventions for treating themselves, co-responders and civilians. This had previously been identified by UNDP with some provision of medical training. However, they were unable to meet demand which has further increased with the expansion of the war.

In modernised fire services, a trauma pack is standard equipment on fire trucks and most firefighters will have an individual first-aid kit (IFAK). Both are absent within SES.

SES volunteers receive a minimal amount of first-aid training but similar to their full-time counterparts, there is a lack of expertise and functional training.

5.2.4 Impacts of War

Due to the complexities of war, casualty access and immediate life support is difficult to achieve. Provision of this medical enhancement of skill and equipment to all SES personnel and volunteers, will enable immediate life-saving interventions at initial point of contact. Relevant research[25] illustrates the importance of early humanitarian intervention for saving lives and critical medical care.

This would encourage seamless joint working between emergency services, reduce the burden on emergency medical services, form integrated care pathways. The ultimate goal of patient outcomes/ survival rates would be dramatically increased.

25 Garber, K., Kushner, A.L., Wren, S.M. et al. Applying trauma systems concepts to humanitarian battlefield care: a qualitative analysis of the Mosul trauma pathway. Confl Health 14, 5 (2020). https://doi.org/10.1186/s13031-019-0249-2

As a direct result of the war, emergency incidents now involve more complex and frequent trauma related rescue scenarios. The SES operational arena is more perilous than ever before with risk of fatal and critical injury from direct Russian attacks and secondary effects such as unforeseen collapse, secondary explosions and injuries caused due to stress and fatigue. Such incidents produce convoluted injuries such as catastrophic bleeding, body part loss, airway compromise and severe burns.

Unfortunately, SES are not in a capable position to administer immediate life support to themselves and others. Figure 10 depicts a destroyed fire truck. SES have recognised that the eight severely injured firefighters, fortunately survived as they were close to immediate medical care. A different scenario may have prevailed in a rural area as the crews had no medical equipment, personal or team, or the skills to self-care.

Figure 10. An SES fire truck destroyed after hitting a mine in Petrovna, north Kyiv

5.2.5 Cost of Rescue Medical Priority Equipment

GBP £3,089,570.87

5.3 Unexploded Ordnance (UXO)

5.3.1 Capability Description

Unexploded Ordnance (UXO), unexploded bombs (UXB), and explosive remanets of war (ERW) are explosive weapons that failed to function (explode) when they were employed and still pose a risk of detonation, often many decades after they were used or discarded. Explosive Ordnance Disposal (EOD) is the technical term used to describe the deliberate and planned process of safely rendering safe, detonating and disposing of explosive hazards such as UXO, booby traps and mines.

5.3.2 Capability Rating

2 Capability is partially achieved

5.3.3 SES UXO Capability

SES are conducting the bulk of UXO clearance within liberated areas. SES currently fields 104 EOD teams (five members per team) nationally, and plan to recruit and train a further 80 teams in the coming months, bring total strength to approximately 1000 personnel. SES EOD teams respond to callouts from the public and other agencies, removing and destroying unsafe UXO and dangerous munitions. SES EOD are averaging around 500-600 items a day throughout Ukraine.

Unlike humanitarian mine action (HMA) implementers, SES does not currently clear contaminated areas systematically due to its time-consuming nature set against the volume of EOD callouts, the latter being prioritised. SES does have a limited survey and mine clearance capability, but at the time of writing it is understood that this is not being employed.

SES acknowledge that thorough survey of contaminated areas should take place to prior to beginning systematic and prioritised clearance. Due to SES size and reach they are well placed to assist in survey and systematic clearance but need additional technical expertise according to their own members.

SES EOD teams regularly comment regarding the availability issues of STANAG (NATO Standard Agreement based) compliant body armour, helmets and PPE. These are essential in mitigating risk of operators conducting EOD operations. Furthermore, teams lack mine clearance/ UXO detectors and other essential EOD equipment such as hook & line kits and de-armers.[26]

26 Please see UXO equipment list for descriptions and web links of items.

5.3.4 Impacts of War

Before the escalation of hostilities towards Ukraine by the Russian Federation, large amounts of UXO and mines littered eastern Ukraine after the 2014 invasion. Since 24 February 2022, intense battles have taken place across north, east, and southern areas of the country. Russian armed forces (RAF) have occupied and fought in densely populated urban areas, there has been no restriction with the use of heavy weapons such as artillery, rockets and air dropped bombs on residential buildings.

Prohibited weapons such as cluster and incendiary munitions have also been deployed, which controversially have a 10-20% failure rate with every use (this can often be as high as 50%).

Subsequently, UXO contamination is prolific and poses an existential threat to residents returning to their homes after hostilities. While the conflict persists, it is impossible to determine the level of UXO/ mine contamination across Ukraine. One can make a relatively sound assumption comparing the level of UXO seen in recently liberated areas in the north: contamination will be extremely high requiring many years of sustained EOD/ clearance operations across Ukraine.

The resource strain on SES to fulfil UXO activities is immense and as SES personnel have stated, a restructuring of SES, legislation change, and modus operandi may need a paradigm shift to new ways of conducting UXO operations.

UXO Statistics (from 24.02.22- 25.05.22)

122,555 pieces of UXO demined
23, 889 hectares cleared

5.3.5 Cost of UXO Priority Equipment

GBP £253,971.95

5.4 Drone/ Unmanned Aerial Vehicle (UAV)

5.4.1 Drone and UAV operations

Drones and UAVs have gained immense traction in emergency services use over the last five years. As the technology develops at a rapid rate, smaller and more capable assets are being developed. Drones and UAVs consist of the recognised quad-copter type, larger plane like UAVs, and now boats and land-based remote vehicles are being utilised in emergency response.

5.4.2 Capability Rating

2 Capability is partially achieved

5.4.3 SES Drone/ UAV Capability

Currently, drones are used within SES however, their establishment is minimal and ad-hoc and their capability is limited to daytime use without a thermal imaging capability (heat detection). There is no training given to pilots.

SESU were reluctant to provide exact numbers of drones and their locations. There has been some discussion between UNDP and SESU with UNDP willing to provide drones however when SES indicated the model, TRI personnel would objectively declare these as useful, but not fully capable for SES use.

The drones used have no thermal image capability, and are therefore unable to operate at night, establish where a casualty is located or where intense heat/ fire exists which could build up and spread. Although this is critically important within a structural fire, this is equally as important in a wildfire (of which seasonally there are many) as critically, it will allow eyes in the sky to prevent firefighters being cut off by fire spread. Some SES drones do not have a zoom capability which means when assessing a scene, it may not allow critical detail to be observed.

Customisation is required for drones being used in the present situation which will allow unlocking of geo-fence restrictions and will cloak the exact location from potential aggressors. This will mean that pilots will be much less exposed to the risk of being identified.

On the scoping mission it was identified that there was a lack of training for pilots and this was a direct request from SES. Although flying an off the shelf drone is relatively easy, to use one in an emergency services context requires training not only for safety but to carry out the specific operational functions for which the pilot will be employed.

5.4.4 Impacts of War

War has meant that firefighters are working in much more dangerous conditions than they normally would. These include working in or near collapsed structures, fires in buildings that have been damaged by bombardment, and operations within the hostile environment of the war itself. This would normally warrant a more remote, initial approach with regards to assessment of the situation as a whole, assessment of the structure and of the surrounding risks. Without such an asset, firefighters are very exposed to risks which might otherwise have been identified and consequently mitigated.

As the hazards of war intensify and increase, SES personnel must be adapting to these new threats and demands. Fully functional drones and UAVs can assist with operational efficiency and effectiveness across all incidents and capabilities. These include wildfires, search and rescue incidents, CBRNE events, recovery operations and even community engagement activities such as early warning and evacuation drills and training.

5.4.5 Cost of Drone/ UAV Priority Equipment

GBP £406,395.50

5.5 Flood Response/ Water Rescue

5.5.1 Capability Description

Flood Response is the process of search, rescue and/ or evacuation from areas impacted by flooding which may be caused by coastal inundation, increased river levels or sustained precipitation resulting in high-flow flash floods.

Water Rescue refers to standard operations for search, rescue and emergency response to casualties in rivers and/ or standing bodies of water such as reservoirs, lakes and ponds. This capability also incorporates ice and mud rescue.

5.5.2 Flood and Water Rescue Capability Rating

1 Capability is not achieved

5.5.3 SES Flood Response/ Water Rescue Capability

SES has a very limited capability in responding to flood and water rescue in terms of equipment, knowledge and skill. Internationally it would be expected that all firefighters in the organisation have a basic awareness and understanding of responding to these types of incidents, with higher levels of training required to respond to and enter still water, and a dedicated specialist response for flowing water and high hazard environments. This is not present and what limited capability exist, is restricted to water-based stations such as those observed in Kyiv and Chernihiv. Even these dedicated capabilities do not meet international standards.

Training is ad hoc and not accredited or standardised. These stations have very limited and ageing equipment, much of which is from the Soviet era or inappropriate donations with limited application for operational environments. This poses a real risk to both responders and casualties. The lack of PPE for responders will also expose them to cold, injury, water borne disease such as leptospirosis and to the hazardous materials often present in flood water. Rescue equipment is very limited and results in rescuers committing into high-hazard environments when the same rescue could be achieved without going into the water.

There is no national standardised, rescue capability to meet the risks presented by major flooding such as that which occurred in June 2020 when three people died in Verkhovyna District (Ivano-Frankivsk) and 800 people were evacuated. At least 5,000 houses were flooded in 187 villages across many western districts, roads and bridges damaged. The resources which are available are not suited to the challenges they face. The paucity of training will expose casualties and rescuers to unacceptable levels of risk. The lack of standardisation will have a detrimental effect on interoperability and the overall response effectiveness.

5.5.4 Impacts of War

The war has impacted this capability in a number of ways. Most obvious has been the targeting of SES staff such as occurred in various incidents in Chernihiv. Whilst delivering humanitarian aid by boat, the vessel came under fire and sank. This has removed the capability for underwater demining and lifesaving response in this area. Opportunities exist to work with other stakeholders to restore this capability. For example, Chernihiv is to receive diving equipment to replace that which was lost but no boat to conduct safe and effective operations.

Another impact has been defensive and or offensive actions resulting in deliberate human-induced flooding as occurred in Demydiv.[27] This incident was a controlled release, but the potential exists for the deliberate targeting of, or collateral damage to structures, resulting in a catastrophic failure of either a dam or reservoir.

Finally, the war has resulted in high demands being placed on the SES resources. There is a risk that in the event of two concurrent response requirements, and therefore a multiple-hazards situation, that the capability of the SES to respond is overwhelmed.

Figure 11. Aftermath of deliberate flooding in the Demidyv area.

5.5.5 Cost of Flood and Water Rescue Priority Equipment

GBP £174,357.66

27 https://www.nytimes.com/2022/04/27/world/europe/ukraine-russia-war-flood-infrastructure.html

5.6 Damage Control & Salvage

5.6.1 Capability Description

Damage Control & Salvage are specific activities that minimise the impacts of a hazard on people, livelihoods, communities and areas. Damage from fire, building collapse, critical infrastructure failure and flooding can be minimized with immediate damage control applications.

These include minimizing use of water for firefighting, immediate ventilation to minimise smoke damage, early vehicle deployment for debris clearing and immediate utility assessment. These pre-habilitation interventions are much more prevalent in war conditions.

5.6.2 Damage Control & Salvage Capability Rating

1 Capability is not achieved

5.6.3 SES Damage Control & Salvage Capability

SES First Responders will have received some basic awareness training in salvage and damage control, most likely at their induction into the service. There is no specific capability within SESU as the local administrative services are responsible for major salvage, debris removal and restoration of utilities.

However, these services cannot engage until an area is deemed safe from the hazard(s). It is therefore essential that SES personnel are aware of the importance of damage control and mitigational techniques and equipment.

From specific visits to fire stations, no salvage related materials or equipment was seen and therefore it can be suggested that damage control is likely to be overlooked due to the focus on immediate emergency response.

The benefits of damage control include risk management, reduction in financial impact of hazards, protection of livelihoods, community utilities, environmental sites and cultural/ heritage buildings and assets.

5.6.4 Impacts of War

It is fully appreciated that damage control is difficult to manage and coordinate in a conflict. However, having procedures in place allows for some capability as opposed to none. One of the trusted methods of this is for SES to partner with local public services for use of their equipment in an inner hazard zone. This will require a balance of SES resources.

War introduces catastrophic damage on a wider scale as already witnessed and early damage control and a 'salvage culture' across all services is recommended. Understanding damage assessments allows for SES to prioritise situations and the use of multi-purpose vehicles can be extremely beneficial for war impacts in communities and critical infrastructure.

Although salvage and damage control techniques and equipment use requires technical training, it would be considerably short and end-user accommodating. Potentially, this is a potential role for trained volunteers attached to SES. At time of writing, SES are coordinating the debris management of a nine-storey building in Kharkiv.

5.6.5 Cost of Damage Control & Salvage Priority Equipment

GBP £976,988.80

5.7 Chemical, Biological, Radioactive, Nuclear, Explosion (CBRNE)

5.7.1 Capability Description

CBRNE involves incidents concerning chemical, biological, radioactive, nuclear and explosive substances. As detailed in Ukraine's risk profile, the hazard genre of these may be technological (dysfunctional equipment), human-induced (human error) or specifically war related. The latter being attributed to specific weapons or attacks on CRBNE installations.

5.7.2 CBRNE Capability Rating

1 Capability is not achieved

5.7.3 SES CBRNE Capability

When analysing the multiple facets of CBRNE, it is evident that SES do not have an adequate capability for optimum response to such incidents. Although the Mobile Rescue Centre have some capability, the quantity of personnel and necessary equipment required does not conform to suggested standards by entities such as the Organisation for the Prohibition of Chemical Weapons and the International Atomic Energy Agency.

Despite the Chernobyl experience and the risk posed by nuclear power stations, there is not ample resources and expertise to deal with significant CBRNE incidents. SES have a mandated responsibility for emergency response in the Chernobyl Alienated Zone but are also overwhelmed with other incidents some of which are extremely demanding such as wildfires.

5.7.4 Impacts of War

The threat of a Russian chemical weapons attack is consistently brimful and various intelligence reports and media outlets have reported this threat from the early days of the war. In the event of such an attack, it is likely that SES would be completely exposed due to their lack of capability. This would incur a devastating effect on the population as witnessed on multiple occasions in Syria.

Second-order impacts of a CBRNE can be vast and multi-faceted. Communities, industries and the economy can be significantly affected and depending on the scale of attack, it may involve years of clean-up and decontamination. Chernobyl is an unfortunate example.

Additionally, chemical and other CBRNE related attacks can have a far-reaching impacton the environment; another area where SES may be required, as public or private environmental services may be unable to operate in such an unsafe situation.

5.7.5 Cost of CBRNE Priority Equipment

GBP £297,509.64

5.8 Safe Working at Height (SWAH) and Rope Rescue

5.8.1 Capability Description

Safe Working at Height (SWAH) is the term used by the emergency services for a system of work, established to provide a responder level of safety so that they may carry out their work safely and with protection from falling. Rope Rescue is the term used to describe the rescue of a casualty from a place with difficult access by the use of ropes and other specialist equipment in order to raise or lower them vertically or move them horizontally.

Falls from height can result in fatalities and major injuries. Usual causes are falls from ladders or through fragile roofs. Emergency services personnel will often work near exposed edges or shafts. Not having a capability will incur additional risk.

A safe system of work ensures that all work at height is risk-assessed, properly planned, appropriately supervised and carried out in a manner that is, so far as is reasonably and practicably safe.

5.8.2 Capability Rating

1 Capability is not achieved

5.8.3 SES SWAH and Rope Rescue Capability

On the recent scoping mission, it was identified that there was a distinct lack of equipment, training and knowledge to deal with work and rescue from height. No specific working at height or rope rescue equipment was present in any SES premises or vehicles. Although incidents where a casualty is required to be rescued from height may not be frequent, if the capability is not present, this may increase the risk to the emergency services personnel and the casualty.

Safe working at height and rope rescue systems have been integrated into the day-to-day work of firefighting activities internationally for some time and is now regarded as standard practice. SES generally rely on the fact that they have many turntable ladders that can reach height; however, a rope rescue capability is required where a turntable ladder would not be suitable such as where there are access problems, down a shaft or inside a structure.

The Mobile Rescue Center does have a SWAH/ Rope Rescue capability however, it is minimal and geographically located in one base, Kyiv. Interestingly, evidence illustrates that many global rope rescue incidents are in rural and mountainous areas.

In Lviv, an MoU was signed in 2011 between SES and the Association of Mountain Guides to raise the professional level of state and community rescuers, as well as promoting the ability to

effectively participate in the joint response to dangerous accidents and emergencies, including search, mountain safety and mountain rescue.

5.8.4 Impacts of War

Currently, additional risk is present due to the amount of structures with extensive damage from bombardment causing exposed edges and an increased risk of falling. In addition to the above, safe working at height and rope rescue are inextricably linked to the work carried out in USAR operations and other SES activities.

Rope rescue provides an additional capability for providing citizen safety. There have been many incidents to date where civilians have been assisted by SES personnel in precarious and exposed situations as a result of attacks.

Creating roped 'lifelines' or handrails are examples of how SES can mitigate this exposure and risk, especially of the civilians are vulnerable, elderly, young or traumatised and in shock.

5.8.5 Cost of SWAH and Rope Rescue Priority Equipment

GBP £110,492.58

Figure 12. Ukrainian civilians crossing a fast-flowing river to escape further Russian attacks.

5.9 Community Engagement

5.9.1 Capability Description

Community Engagement is a multi-sectoral, broad term which incorporates SES interaction with civilians to promote protection, safety education, hazard awareness, voluntary activities, vulnerable populations assistance and early warning.

5.9.2 Community Engagement Capability Rating

2 Capability is partially achieved

5.9.3 SES Community Engagement Capability

SES conduct a wide range of community engagement activities, but limited research indicates these are reactive, ad-hoc and not fully structured, data-driven or evidence-based. The main focal areas include:

I. Mine risk education
II. Hazard awareness
III. Early warning and evacuations
IV. Volunteer programs

Mine risk education (MRE) or Explosive Ordnance Risk Education (EORE) and broader awareness of the risk posed by ERW. This includes structured and direct engagement including demonstrations, school visits, community presentations and informal engagement such as television and radio announcements, posters and flyers. There is no doubt SES are implementing MRE/ EORE however it is felt that response is taking priority understandably, and the community engagement aspect is reduced.

Hazard awareness applies to SES personnel conducting safety information sessions to members of the public. This has included safety education for wildfires, flooding, radiation risk, fire safety, coastal surge and coastal safety, driving and careful road use and industrial safety including mineral mines.

Further research is needed however it is construed that most sessions are informal talks or presentations without structure and adequate resources such as information bulletins and flyers. Globally, emergency services have adopted an all-community/ inclusive approach to community engagement which is built on a solid foundation of risk profiling and hazard identification, vulnerability and exposure analysis. This does not seem to be the situation in Ukraine despite their alignment and establishment as focal points for the Sendai Framework for Disaster Risk Reduction.

Early warning systems have been developed as a result of the ongoing Russian aggression pre-2014 and different oblasts and cites operate their systems differently. Some are connected

via live information and operated automatically through algorithms whereas others in more localised areas, are operated manually.

The SES manage and coordinate a flood-specific early warning and notification system on the border between Ukraine and Slovakia. This was installed in 2016 by a collaborative cross-border project which seen the installation of 40 electronic sirens, four relay units and one control centre in Ukraine. Nuclear power plants and other installations also have their own local systems for alert and evacuation.

In 2021, the SESU formed a volunteer fire service[28] and constructed multiple community fire stations and citizen safety sectors which provide shelter, water and food in the event of communities being impacted by hazards.

5.9.4 Impacts of War

The immediate and demanding impacts of the war have increased the community engagement activity of SES astronomically. SES volunteers are registered at 10,000 across the country which is a formidable figure but comes with many considerations including equipment, training, safety and duty of care and legislative arrangements.

According to recent SES statistics 129,055 members of the public have received psychological assistance and/ or psychosocial care (PSS). This is a new requirement for SES and although a much deeper analysis is required, it is likely that SES put themselves forward for this role as a result of their humanitarian nature and position. This adds further strain to a an already pressured organisation which must be commended for adding this important provision to their portfolio.

Figure 13. Local residents visiting their local fire station in Irpin to access PSS assistance and report damage.

28 https://dmpo.dsns.gov.ua/en

SES are now responsible for delivering vital aid, supplies, food and water to those in need. They are establishing power, operating generators and simply doing whatever it takes to protect and assist communities.

Early warning mechanisms have also changed with the Government of Ukraine rapidly developing application-based systems for early warning and notification to smartphones. Initially, this was regarded as an essential asset however its adherence has diminished in cities such as Lviv and Kyiv. This is unfortunate and as research illustrates, early warning systems must be fully implemented with dedication, sustainable management, inclusive community engagement and clear information dissemination.[29]

Figure 14. Volunteers assisting with debris removal at the scene of a building collapse in Kkarkiv.

5.9.5 Cost of Community Engagement Priority Equipment

GBP £47,116.20

29 Community Early Warning Systems in Syria (Murphy, 2016).

5.10 Firefighting

5.10.1 Capability Description

5.10.1 Firefighting and fire and rescue service operations involve crews responding to a variety of emergencies as frontline responders. Ukraine firefighters account for over 60% of the State Emergency Service and has a typical national fire service structure that is split into the regions around Ukraine.

5.10.2 Firefighting Capability Rating

2 Capability is partially achieved

5.10.3 SES Firefighting Capability

The SES fire service responds immediately to all emergencies involving fires, transport incidents, hazardous materials (Hazmat), rescues from a variety of locations as well as providing an initial response to many other types of emergencies. A standard fire appliance is equipped to deal with firefighting and rescue from fires, a basic rescue capability for transport emergencies and dealing with incidents involving hazmat.

A rescue appliance has additional capability to deal with larger transport emergencies or rescue of casualties from entrapped situations. There are other specialist capabilities that include emergency response to other types of incidents that are dealt with in other areas of this report. There is little advanced rescue equipment for activities such as urban search and rescue (also covered in other areas of this report) and some of the equipment is very dated. There are areas of firefighter safety where there is not sufficient equipment to provide recognised safe systems of work.

5.10.4 Impacts of War

Firefighters across Ukraine are in a state of readiness, more than ever before. The provided statistics clearly illustrate the human and financial impact of the war. Although an element of risk is involved in firefighting operations, it is controlled and managed through professionalism, training and experience. Firefighting operations in Ukraine at this time present unacquainted hazards from shelling, light and heavy weapons, mortars and mines.

SES equipment already had its limitations and is now at a tipping point between dysfunction and borderline fit-for-use. For example, in Irpin station they have the luxury of battery-operated tools and in other fire stations, the similar tools use cables and hoses which enforces additional reliance on personnel and equipment. In a war situation minimizing resources and personnel is essential as an increased safety layer and these subtle differences can be make a difference between injury, life and death.

5.10.5 Cost of Firefighting Priority Equipment

GBP £95,581.00

6. CLOSING NOTES

The State Emergency Services of Ukraine are a formidable organisation of dedicated women and men. They are currently operating in one of, if not the most challenging emergency response environments on earth. As they conduct firefighting and rescue operations in a war zone, they remain focused on their primary mandate of saving life and rendering humanitarian assistance. They are operating in an 'All/ Multiple Hazards' arena yet even more hazards may present as the seasons morph into intense dry summers, potentially interspersed with regional flash and sustained rainfall. The threat of war, natural, and human-induced major hazards compounded with SES routine emergencies is very real and should be horizon scanned- urgently.

The scoping mission was limited to five days in Ukraine which was challenging to build relationships, map stakeholders and collate pertinent information. SES were extremely laboured with the demands of the situation and understandably could not offer a great amount of time. Furthermore, SES were conscious of information security and the release of such. It was intentional that information gathering was restricted to operational capacity and capability as opposed to geo-locations and numbers of resources. The team can be satisfied that an exceptional level of trust was developed in a short space of time and conversations and technical information sharing between TRI and SES personnel continues.

It is noteworthy that SES do not have the time to pause and fully restructure approaches to training, development and equipment replenishment. It is feared that this momentum will have to continue as the summer, autumn and winter seasons envelope the vast country.

Although data illustrates that winters are not just as lengthy compared to previous years, winterization considerations are an important factor for further capacity and capability development. Vehicles, equipment and SES buildings require enhancement for thermal protection to improve efficiency and operational effectiveness.

From this report, it can be proposed that multiple capabilities can be rapidly improved with focused training and equipping. These proven interventions produce optimum gains in a relatively short space of time. Although a simultaneous top-down and bottom-up approach is evidenced as best practice, the strategic component could follow quite easily as SES have an established, professional structure in place.

A concern is that SES are spread too thin across an expansive country with ongoing emergencies, at different scales, in various locations. The report has highlighted many of the SES remits from underwater demining, civilian evacuation, food delivery, mountain rescue and coordinating the Sendai Framework. A technical expert may put forward an argument that with this number of expected capabilities, stretched resources, unwavering hazards and an unstructured training and development pathway, SES could succumb to even more pressure than at present.

Gaps may start to present and it is essential that SES maintain optimum service delivery, to the right people at the right time- in an all/ multiple hazards country. New disciplines where SES are now operating include PSS/ MHFA, major salvage and damage control, major evacuation and mass casualty incidents which are a direct result of the war. Where practicable, data should be used for training, upskilling, planning and coordinating resources to assist SES decision-makers.

SES (and emergency workers in general across the globe) are one of the most trusted professions in Ukraine, even before the war. Ukrainian citizens are supporting the military, emergency services and government in an immense portrayal of solidarity.

Figure 15. SES Resilience Phases.

The three phases of resilience for SES and Ukrainian stakeholders consist of Resist, Recover and Revitalise. Resist applies to those areas which are occupied and SES operational integrity and sustainability is maintained. Recover applies to areas which are liberated and SES immediate actions can be implemented, enhanced and sustained. Revitalise looks at further developing capacity, capability and resilience for the State Emergency Services and it's capabilities, existing and war-related. Additionally, partners and the wider community will greatly benefit from a nationally strengthened and amplified SES.

SES operate tirelessly under many mantras, one being 'Whatever it takes'. Assisting SES and partners to save life and protect communities is a privilege. TRI personnel experienced their humility, openness, humanitarianism and dedication during the short time in Ukraine but instantly recognised they are in need of support, not just from resources, training and equipment but assistance in dealing with their own trauma, fatigue and psychological stress. This report and the priority equipment list intends to highlight why, what, how and where this support is required.

7. KOBO DIAGNOSTIC

C2 Diagnostic Master_UKR

Sir/ Madam,

It is a pleasure to meet you. Thank-you for your time in allowing us to undertake this interview and/ or information gathering session. We are from Technical Rescue International, a UK-based team of operational specialists in multiple areas of rescue, emergency and disaster management.

On behalf of Chemonics International and the Partnership For a Resilient Ukraine, we are conducting a capacity and needs assessment of the State Emergency Services of Ukraine. The assessments will focus on equipment, capabilities, structures and systems.

In order to optimize the assessment project, may we ask that you answer as objectively as possible, however some questions will require your opinion and rating. The majority of questions and initial responses can be followed with discussion and engagement, the process is very informal.

In summary, we are trying to extract as much information as possible about the SESU which in turn will provide a report against European and international emergency services frameworks.

We fully appreciate the sensitivity of some questions and if you are unsure about answering, it is fully understood. Please feel free to ask for clarification at any time.

Technical Rescue International

A1 Respondent Name

A2 Respondent role/ rank/ grade

A3 Respondent's position description

A4 Respondent's level

- ◯ Strategic
- ◯ Tactical
- ◯ Operational
- ◯ Other

A5 Respondent's length of service

A6 Respondent's current technical area

- ☐ Corporate affairs/ HQ
- ☐ ICT
- ☐ Operations general
- ☐ Operational leadership
- ☐ Operational support
- ☐ Research and development
- ☐ Strategic leadership

A7 Respondent's technical capabilities

- ☐ CBRNe
- ☐ Communications
- ☐ Confined Space
- ☐ CW
- ☐ Humanitarian
- ☐ Firefighting urban
- ☐ Firefighting industrial
- ☐ Firefighting wildfire
- ☐ Transport Aviation
- ☐ Transport Marine
- ☐ Transport Rail
- ☐ Transport RTC
- ☐ Trauma Care
- ☐ UAV/ Drone ops.
- ☐ Urban Search and Rescue (USAR)
- ☐ UXO/ Demining
- ☐ Water Rescue and Flood Response
- ☐ Working at Height/ Rope Rescue

B1 Is organisational governance formally implemented in SESU?

- ◯ Yes
- ◯ No
- ◯ Unsure

B2 Provide an overview of governance and/ or relevant strategic changes that SESU has undertaken over the last 10 years.

B3 Has the conflict impacted strategy and governance?

- ◯ Yes
- ◯ No
- ◯ Unsure

B4 How?

C2 Diagnostic Master_UKR

Шановний(-а) пане/пані,

Приємно познайомитись. Дякуємо за час, який Ви приділите цьому опитуванню.
Ми є британською командою оперативних спеціалістів у різних сферах порятунку, надзвичайних ситуацій та управління катастрофами з організації "Technical Rescue International" (TRI).

Від імені компанії Кімонікс Інтернешнл (Chemonics International) та Фонду "Партнерство за сильну Україну" (Partnership For a Resilient Ukraine, PFRU) ми проводимо оцінку потенціалу та потреб Державної служби з надзвичайних ситуацій України. Оцінка фокусується на обладнанні, можливостях, структурах і системах.

Для оптимізації оцінки, ми просимо Вас відповідати об'єктивно; деякі запитання потребуватимуть розширеної думки та оцінки. Більшість запитань та початкових відповідей можуть супроводжуватися додатковими уточненнями, при цьому, процес опитування є дуже неформальним.

Врешті, ми намагаємося отримати якомога більше інформації про ДСНС, яка, у свою чергу, увійде у звіт, в якому буде проаналізовано роботу ДСНС України у порівнянні до роботи європейських та міжнародних структур служб з надзвичайних ситуацій.

Ми цілком розуміємо делікатність деяких запитань, і якщо Ви не впевнені у відповіді, це цілком зрозуміло. Будь ласка, не соромтеся звертатися за роз'ясненнями в будь-який час.

Міжнародна організація технічного порятунку (TRI)

A1 Ім'я респондента

A2 Посада/ранг респондента

A3 Опис посадових обов'язків респондента

A4 Рівень респондента

- ◯ Стратегічний рівень
- ◯ Тактичний рівень
- ◯ Оперативний рівень
- ◯ Інше

A5 Стаж респондента

A6 Поточна технічна сфера відповідальності респонднента

- ☐ Головний офіс
- ☐ Інформаційно-комунікаційні технології
- ☐ Загальна оперативна робота
- ☐ Оперативна робота -керівник
- ☐ Оперативна робота - адміністративна підтримка
- ☐ Дослідження та розвиток
- ☐ Стратегічне лідерство

A7 Технічна спроможність респондента

- ☐ Захист від зброї масового ураження
- ☐ Комунікація
- ☐ Замкнений простір
- ☐ Хімічна зброя
- ☐ Гуманітарна робота
- ☐ Ліквідація пожеж - місто
- ☐ Ліквідація пожеж - промислова зона
- ☐ Ліквідація пожеж - лісова пожежа
- ☐ Транспортне сполучення - авіа
- ☐ Траспортне сполучення - водне
- ☐ Транспортне сполучення - залізничне
- ☐ Транспортне сполучення - сухопутне
- ☐ Лікування травм
- ☐ Професійне управління БПЛА
- ☐ Пошуково-рятувальні роботи в місті
- ☐ Нерозірвані боєприпаси/Розміновування
- ☐ Рятувальні роботи на воді, реагування, мінімізація та ліквідація наслідків повені та паводків
- ☐ Висотні роботи/рятувальні роботи з евакуацією по вертикальній мотузці

B1 Чи формально провадиться корпоративне управління в ДСНСУ?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

B2. Дайте загальну характеристику корпоративного управління та або відповідних стратегічних змін, що були впроваджені протягом останніх 10 років

B3. Чи війна якимось чином вплинула на організаційну стратегію та управління?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

B4 Яким чином?

B5 Does SESU have a strategic plan?

- ◯ Yes
- ◯ No
- ◯ Unsure

B6 When was the plan/ strategy implemented?

yyyy-mm-dd

B7 Brief description of the plan.

B8 Hss the plan been negatively impacted by the conflict?

- ◯ Yes
- ◯ No
- ◯ Unsure

B9 Please elaborate

B10 What legislation or policies are in place for major emergencies or disasters?

B11 Please elaborate

B12 How have these been implemented during the conflict?

C1 Are there early warning systems?

- ◯ Yes
- ◯ No
- ◯ Unsure

C2 If yes, are they in every region and community?

- ◯ Yes
- ◯ No
- ◯ Unsure

C3 Were the EWS in place pre-conflict?

- ◯ Yes
- ◯ No
- ◯ Unsure

C4 Are they multi-hazard EWS?

- ◯ Yes
- ◯ No
- ◯ Unsure

C5 Which agency is responsible for EWS?

C6 Please describe that national to community EWS infrastructure

C7 Are all members of the community fully aware of the EWS?

- ◯ Yes
- ◯ No
- ◯ Unsure

C8 Are vulnerable populations fully considered within the EWS?

- ◯ Yes
- ◯ No
- ◯ Unsure

C9 If yes, which vulnerable populations?

- ☐ Women
- ☐ Children
- ☐ Elderly
- ☐ Physically disabled
- ☐ Psychological patients
- ☐ Mass populations- hospitals
- ☐ Mass populations- prisons
- ☐ Mass populations- other
- ☐ Visually impaired
- ☐ Hearing impaired

C10 Is there a standardised policy or SOP for EWS activation, evacuation and awareness raising?

- ◯ Yes
- ◯ No
- ◯ Unsure

C11 Please describe

B5. Чи має ДСНС стратегічний план?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

B6. Коли було впроваджено цей план/цю стратегію?

yyyy-mm-dd

B7. Короткий опис плану

B8. Чи війна вплинула негативним чином на цей план?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

B9. Будь ласка, поясніть

B10. Яким чином регулюється діяльність ДСНС (на законодавчому рівні)?

B11. Будь ласка, поясніть

B12. Яким чином ці регуляторні засади впроваджуються під час війни?

C1. Чи встановлені автоматизовані системи раннього виявлення надзвичайних ситуацій/загроз та оповіщення?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C2.Якщо так, чи вони існують в кожній області, громаді?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C3. Чи ці системи були встановлені ще до війни?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C4. Чи здатні ці системи виявляти різні надзвичайні ситуації (мульти-системи)?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C5. Який підрозділ є відповідальним за ці системи?

C6. Яким чином національні системи раннього оповіщення інтегровані в інфраструктуру систем раннього опоіщення громади ?

C7. Чи всі члени громади знають про наявність систем оповіщення?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C8. Чи повністю враховані вразливі категорії населення у розрізі систем раннього оповіщення?

- ◯ Так
- ◯ Не
- ◯ Не знаю

C9. Якщо так, які саме вразливі категорії?

- ☐ Жінки
- ☐ Діти
- ☐ Люди похилого віку
- ☐ Особи з інвалідністю
- ☐ Люди з психічними порушеннями
- ☐ Населення - шпиталі
- ☐ Населення - в'язниці
- ☐ Населення - інше
- ☐ Особи з вадами зору
- ☐ Особи з вадами слуху

C10. Чи існує стандартизована регуляція чи стандартна операційна процедура для активації систем раннього оповіщення, евакуації та інформування населення?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

C11. Будь ласка, надайте детальнішу інформацію

C12 What type of technological and manual systems are in place?

- [ ] Telemetry based-systems
- [ ] Military grade spotting
- [ ] ICT based systems
- [ ] Manual sirens
- [ ] Mobile warning patrols
- [ ] Designated community personnel
- [ ] Forecast linked systems (natural hazards)
- [ ] Local systems

C13 Alert mechanisms

- [ ] Television
- [ ] Radio
- [ ] SMS
- [ ] Whats App
- [ ] Signal
- [ ] Email
- [ ] Twitter
- [ ] Facebook
- [ ] Siren-based

C14 If siren-based, are there specific tones, durations for different purposes

_____

C15 Would all citizens around the country know exactly what to do and where to go on hearing an early warning?

_____

C16 Are the EWS multi- hazard compatible?

_____

C17 Were the EWS in place before the conflict?

_____

C18 If any, what changes or enhancements have been made to the EWS as a direct impact of the conflict?

_____

C19 Have the EWS been deliberately targeted and where?

_____

C20 Have the EWS been damaged as direct/ indirect result of conflict impacts and where?

_____

D1 Does SESU provide community engagement activities?

- ◯ Yes
- ◯ No
- ◯ Unsure

D2 Are these nation-wide programmes?

- ◯ Yes
- ◯ No
- ◯ Unsure

D3 If no, state reasons please

_____

D4 Which members of the community are provided for with activities and projects?

- [ ] All
- [ ] Children
- [ ] Elderly
- [ ] Vulnerable populations
- [ ] Teens
- [ ] Community groups- religious, health, general
- [ ] Male specific
- [ ] Female specific
- [ ] Disadvantaged youths
- [ ] Urban communnities
- [ ] Rural communities
- [ ] Impoverished areas
- [ ] Migrants/ refugees (pre-conflict)
- [ ] Other
- [ ] Specific geographic areas

D5 For the reasons above, please provide an overview for each and the type of activities and why?

_____

D6 What are the drivers for community engagement activities?

- [ ] Research and data from SESU statistics
- [ ] Community requests
- [ ] Hazard mitigation
- [ ] Specific community protection
- [ ] Always done it
- [ ] Significant issues arising
- [ ] Inter-agency activity eg. crime prevention

C12. Технологічні та мануальні системи якого типу наразі використовуються?

- [ ] Телеметричні системи
- [ ] Системи оптичного прицілу
- [ ] Інформаційно-комунікаційні технології
- [ ] Ручні сирени
- [ ] Мобільні патрулі
- [ ] Спеціальні члени громади
- [ ] Системи пргнозування (природні катастрофи)
- [ ] Локальні системи

C13. Механізми оповіщення тривоги?

- [ ] Телевізійні системи
- [ ] Радіозв'язок
- [ ] Текстої повідомлення
- [ ] Whats App
- [ ] Signal
- [ ] Email
- [ ] Twitter
- [ ] Facebook
- [ ] Сирена

C14. Якщо це механізми з використанням сирени, чи існують спеціальні гудки, тривалість звучання попереджувального сигналу для різних ситуацій?

_____

C15. Чи всі громадяни в країні точно знають, що робити і куди йти, коли почують сигнал?

_____

C16. Чи системи раннього оповіщення є сумісними з іншими системами?

_____

C17. Чи функціонували системи раннього оповіщеня ще до початку воєнних дій в Україні?

_____

C18. Які зміни або покращення систем раннього оповіщення застосовуалися в результаті початку воєнних дій?

_____

C19. Чи стали системи раннього оповіщення мішенями та де саме територіально?

_____

C20. Чи зазнали системи раннього оповіщення пошкоджень як прямий/непрямий результат воєнних дій і де саме ?

_____

D1.Чи ДСНС проводить заходи із залучення громади ?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

D2. Чи є ці програми загальнонаціональними?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

D3. Якщо ні, вкажіть причини ?

_____

D4. Які члени громади залучені до яких заходів та проєктів?

- [ ] Всі
- [ ] Діти
- [ ] Люди похилого віку
- [ ] Вразливі категорії населення
- [ ] Підлітки
- [ ] Соціальні групи - релігійні, охорона здоров'я, загальне
- [ ] Для чоловіків
- [ ] Для жінок
- [ ] Вразливі категорії молоді
- [ ] Міське населення
- [ ] Сільське населення
- [ ] Населення з низьким рівнем доходу
- [ ] Мігранти/біженці (до війни)
- [ ] Інше
- [ ] Окремі географічні зони

D5. Будь ласка опишіть кожен з проектів та вид заходів, та чому саме вони застосовуються?

_____

D6. Які існують драйвери для громадських заходів?

- [ ] Дослідження та статистичні дані ДСНС
- [ ] Запити від громади
- [ ] Зниження небезпеки
- [ ] Спеціальний захист для громади
- [ ] Завжди це робив
- [ ] Виникли значні проблеми
- [ ] Міжорганізаційна співпраця напр. попередження злочинності

D7 Types of community engagement activities and projects?

- [ ] Fire safety- home
- [ ] Fire safety- schools programmes
- [ ] Fire safety- businesses and industry
- [ ] Fire safety- arson prevention
- [ ] Youth leadership scheme
- [ ] Attendance at community events
- [ ] Community training- basic firefighting
- [ ] Community training- road safety
- [ ] Youth safe driving
- [ ] UXO/ Demining related
- [ ] Water safety/ drowning risk reduction

D8 Which particular hazards have prompted community engagement activities?

- [ ] Fire urban
- [ ] Fire rural
- [ ] Road traffic collisions
- [ ] UXO/ ERW
- [ ] Drownings
- [ ] Flooding
- [ ] Landlside
- [ ] Coastal incidents
- [ ] Snow/ ice related incidents

D9 Please elaborate on any of the above

_____

D10 Which other agencies does SESU partner with for community engagement activities?

- [ ] Red Cross
- [ ] Emergency Medical Services
- [ ] Option 3
- [ ] Option 4
- [ ] Option 5
- [ ] Option 6
- [ ] Option 7
- [ ] Option 8
- [ ] Option 9
- [ ] Option 10

D11 What community engagement policies are in place?

_____

D12 Does SESU have a safeguarding or similar policy in place for engaging with members of the community?

_____

D13 How has the conflict changed community engagement activities?

_____

D14 In your opinion has the conflict helped form a stronger relationship between SESU and local communities?

- ◯ Yes
- ◯ No
- ◯ Unsure

D15 Please discuss what activities have been maintained from pre-conflict?

_____

D16 Please discuss what new activities have been introduced as a direct result of the conflict?

_____

D17 Has SESU widened it's scope with communities and partners as a direct result of the conflict?

- ◯ Yes
- ◯ No
- ◯ Unsure

D18 Please discuss

_____

D19 Is the SESU under-resourced for community engagement as a direct result of conflict impacts?

- ◯ Yes
- ◯ No
- ◯ Unsure

D20 If yes, what are possible solutions in your opinion?

_____

E1 Does SESU have an organisational Management Information System (MIS)?

- ◯ Yes
- ◯ No
- ◯ Unsure

E2 Please provide an overview

_____

D7. Які типи заходів і проєктів із залученням громадськості застосовуються?

- [ ] пожежна безпека - вдома
- [ ] пожежна безпека - шкільні програми
- [ ] пожежна безпека - бізнеси та підприємства
- [ ] пожежна безпека- попередження підпалу
- [ ] Схема молодіжного лідерства
- [ ] Відвідування заходів із зілучення громади
- [ ] Навчання для представників громади - основи ліквідації пожежі
- [ ] Навчання для представників громади - безпека дорожнього руху
- [ ] Безпечне водіння для молоді
- [ ] Нерозірвані боєприпаси/Розміновування
- [ ] Водна безпека

D8. Які саме загрози стали поштовхом до проведення заходів із залученням громадськості?

- [ ] Пожежа в місті
- [ ] Пожежа сільська місцевість
- [ ] Зіткнення на дорозі
- [ ] Нерозірвані боєприпаси/Зброя з підвищеним виділенням радійції
- [ ] Утоплення
- [ ] Повені
- [ ] Оповзні
- [ ] Інциденти на березі
- [ ] Інциденти, які пов'язані зі снігом/ сходженням льоду

D9. Будь ласка дайте більше інформації по будь якому із заходів?

_____

D10. З якими структурами співпрацює ДСНС у проведенні таких заходів?

- [ ] Червоний Хрест
- [ ] Служби швидкої медичної допомоги
- [ ] Варіант 3
- [ ] Варіант 4
- [ ] Варіант 5
- [ ] Варіант 6
- [ ] Варіант 7
- [ ] Варіант 8
- [ ] Варіант 9
- [ ] Варіант 10

D11. Які механізми залучення громадськості використовуються?

_____

D12. Чи має ДСНС стратегію захисту чи якусь подібну стратегію при залученні членів громади?

_____

D13. Яким чином змінилися заходи із залучення громадськості з початком воєнних дій?

_____

D14. На вашу думку, чи покращилася взаємодія між ДСНС да місцевими громадами в результаті початку конфлікту ?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

D15. Будь ласка, вкажіть, які саме заходи застосовуються зараз ще з довоєнних часів?

_____

D16. Будь ласка, вкажіть, які нові заходи було запроваджено в результаті початку воєнних дій ?

_____

D17. Чи ДСНС розширила обсяг своєї діяльності у взаємодії з громадами та партнерськими організаціями в результаті початку воєнних дій?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

D18. Будь ласка, деталізуйте

_____

D19. Чи втратила ДСНС ресурси для роботи з громадськістю в результаті початку воєнних дій в Україні?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

D20. Якщо так, яким чином можна вирішити нестачу ресурсів?

_____

E1. Чи має ДСНС інформаційну систему управління?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E2. Будь ласка, надайте короткий опис цієї системи?

_____

E3 Does the MIS facilitate all of the components below

- [ ] Personnel and human resources
- [ ] Incident recording system
- [ ] All SESU activities- operations, engagements, training and development
- [ ] Assets and vehicle management
- [ ] Training and development
- [ ] Risk information
- [ ] Capabilities
- [ ] Geographic Information Systems
- [ ] ICT

E4 Does SESU have a secure and functional ICT system?

- ◯ Yes
- ◯ No
- ◯ Unsure

E9 Do all staff have a SESU personal email account and access to ICT applications?

- ◯ Yes
- ◯ No
- ◯ Unsure

E10 Does SESU have an Incident Recording System for operations?

- ◯ Yes
- ◯ No
- ◯ Unsure

E11 Is the IRS platform-based and linked to an asset mobilisation system for call-outs?

- ◯ Yes
- ◯ No
- ◯ Unsure

E12 Please provide detail?

_____

E13 If not, what is the operational information management process?

_____

E14 Has the MIS been changed or enhanced as a direct result of conflict impacts?

- ◯ Yes
- ◯ No
- ◯ Unsure

E15 How?

_____

E16 What additional information has been managed- input or output related?

_____

E17 Does the SESU have a Geographic Information System?

- ◯ Yes
- ◯ No
- ◯ Unsure

E17 What are the various layers and information datasets available?

- [ ] Flood
- [ ] Fire
- [ ] HazMat
- [ ] Hydromet Data (River, sea levels)
- [ ] Live incident tracking
- [ ] Population
- [ ] RTC
- [ ] Search and Rescue
- [ ] Weather and forecasting
- [ ] Aerial mapping
- [ ] Street level mapping
- [ ] Satellite imagery
- [ ] Topographic/ OS mapping
- [ ] UAV imagery
- [ ] UXO/ Demining data
- [ ] Other

E18 What is the GIS operational platform?

_____

E19 Has the platform been updated with conflict specific layers?

- ◯ Yes
- ◯ No
- ◯ Unsure

E20 Please describe the layers (confidentiality permitting)

_____

E21 Please rate the SESU MIS	1	2	3
Please rate	◯	◯	◯

E3. Чи наявна інформаційна система забезпечує всі ці компоненти ?

- [ ] Персонал і людські ресурси
- [ ] Система реєстрації інцидентів
- [ ] Вся діяльність ДСНС -оперативна робота, співпраця, навчання
- [ ] Управління матеріальнми ресурсами та транспортом
- [ ] Навчання та розвиток
- [ ] Інформація стосовно ризиків
- [ ] Потужності
- [ ] Геоінформаційні системи
- [ ] Інформаційно-комунікаційні системи

E4. Чи має ДСНС безпечну та функціональну інформаційно-комунікаційну систему?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E9. Чи всі співробітники ДСНС мають робочий email та доступ до комп'ютерних програм/застосунків?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E10. Чи має ДСНС систему/журнал реєстрації нещасних випадків для оперативої роботи?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E11. Чи є система реєстрації нещасних випадків онлайн системою та чи підключена вона до системи мобілізації ресурсної бази під час викликів?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E12. Будь ласка, надайте детальнішу інформацію?

_____

E13. Якщо ні, як виглядає процес оперативного управління?

_____

E14. Чи було впроваджено якісь зміни/функціональні покращення до наявної інформаційної системи в результаті наслідків воєнних дій?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E15. Які саме?

_____

E16. Яку додаткову вхідну чи вихідну інформацію було оброблено?

_____

E17. Чи має ДСНС Географічну інформаційну систему?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E17. Які прошарки та пакети данних є в наявності?

- [ ] Повінь
- [ ] Пожежа
- [ ] Небезпечні речовини
- [ ] Гідрометереологічні дані (рівень річки,моря)
- [ ] Трекер інцидентів
- [ ] Населення
- [ ] Годинник реального часу
- [ ] Пошуково-рятувальні роботи
- [ ] Погода та прогнози
- [ ] аерозйомка
- [ ] мапування вулиць
- [ ] Спутникові зображення
- [ ] Топографічне мапування/ обстеження боєприпасів
- [ ] Зображення БПЛА
- [ ] Дані про нерозірвані боєприпаси /Розміновування
- [ ] Інше

E18. На якій операційній платформі працює геоінформаційна система?

_____

E19. Чи проводився апдейт прошарків геосистеми відповідною інформацією в зв'язку з початком воєнних дій?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E20. Будь ласка, опишіть прошарки наявної ГІС (за відсостності застрежень конфіденційності)

_____

E21 Будь ласка оцініть інформаційну систему управління ДСНС	1	2	3
Будь ласка, оцініть	◯	◯	◯

E22 Please rate the SESU GIS

	1	2	3
Please rate	◯	◯	◯

E23 Any further comments relating to MIS and GIS?

E24 Does SESU have access to detailed topographical mapping?

- ◯ Yes
- ◯ No
- ◯ Unsure

E25 Is the mapping available in hard and soft copy formats?

- ◯ Yes
- ◯ No
- ◯ Unsure

F1 Please provide an SESU organisational chart or schematic

- ◯ Yes
- ◯ No

F2 What is the structure rationale?

- ☐ Historical
- ☐ Geo-administrative compatible
- ☐ Risk based
- ☐ Hazard based (natural, ERW/ UXO)
- ☐ Legislation and policy driven
- ☐ Leadership driven
- ☐ Data driven (combination of factors)
- ☐ Best use of resources

F3 How has the structure changed during the conflict?

F4 Has it changed at:

- ☐ Strategic level
- ☐ Tactical level
- ☐ Operational level
- ☐ All

F5 What are the main changes at the respective levels and why?

F6 At present, what are the main issues and needs that SESU face regarding the organisational structure?

F7 In your opinion, what are possible solutions- even if temporary?

F8 Please explain the rank/ role/ grade structure in SESU?

F9 Please detail the operational structure of teams and crews at SESU stations/ bases.

F10 What is their shift/ rotation?

F11 Are operational teams male and female?

- ◯ Yes
- ◯ No

F12 If not, why not?

F13 Pre-conflict, does SESU have a national training and development plan for all personnel?

- ◯ Yes
- ◯ No
- ◯ Unsure

F14 If not why not?

F15 Please list the training areas below

- ☐ Strategic leadership
- ☐ Operational leadership
- ☐ Finance
- ☐ Administration
- ☐ Instructor qualifications
- ☐ Fire safety
- ☐ Community engagement
- ☐ Recruit training
- ☐ Specialist- safeguarding
- ☐ Specialist- Inclusion and diversity realted
- ☐ Specialist- PSEAH
- ☐ Operational capabilities

E22 Будь ласка, оцініть ГІС ДСНС

	1	2	3
Будь ласка, оцініть	◯	◯	◯

B23. Чи маєте коментарі стосовно інформаційної системи управління та ГІС?

E24. Чи має ДСНС доступ до системи детального топографічного мапування ?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

E25. Чи мапування доступне у паперовому та електронному фоматах?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

F1. Будь ласка, надайте організаційну структуру чи схематично наведіть структуру ДСНС ?

- ◯ Так
- ◯ Ні

F2. Яка логіка формування організаційної структури?

- ☐ Історичні
- ☐ Гео-адміністративна сумісність
- ☐ Прив'язка до ризиків
- ☐ Прив'язка до небезпеки (природні катаклізми, ВПВ/НВБ)
- ☐ Спирається на законодавчу базу
- ☐ Спирається на лідерство
- ☐ Спирається на дані (поєднання факторів)
- ☐ Оптимальне використання ресурсів

F3. Яким чином змінилася структура від початку воєнних дій ?

F4. Чи вона змінилася на рівні...?

- ☐ Стратегічний рівень
- ☐ Тактичний рівень
- ☐ Оперативний рівень
- ☐ Всі

F5. Якими є основні зміни на відповідних рівнях і з яких причин їх було впроваджено ?

F6. На даний момент з якми основними труднощами та потребами стикається ДСНС стосовно організаційної структури ?

F7. На вашу думку, які існують рішення, навіть тимчасові?

F8. Будь ласка, поясніть систему рангів/посад/рівнів в структурі ДСНС?

B9. Будь ласка, деталізуйте операційну структуру команд і бригад пожежних частин/станцій ДСНС

F10. Яка в них зміна/ротація?

F11. Чи оперативні бригади складаються з жінок і чоловіків?

- ◯ Так
- ◯ Ні

F12. Якщо ні, то чому?

F13. Чи до початку воєнних дій в Україні мала ДСНС національний план навчання та розвитку для всіх співробітників?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

F14. Якщо ні, чому?

F15. Будь ласка, наведіть сфери за якими проводиться навчання?

- ☐ Стратегічне лідерство
- ☐ Оперативне керівництво
- ☐ Фінанси
- ☐ Адміністративна робота
- ☐ Кваліфікація інструктора
- ☐ Пожежна безпека
- ☐ Залученість громадськості
- ☐ Навчання рекрутованого персоналу
- ☐ Спеціаліст - охорона
- ☐ Спеціаліст- інклюзія та врізноманітність
- ☐ Спеціаліст із захисту від сексуальної експлуатації, насильства та домагань
- ☐ Операційна спроможність

F16 Is there an annual training calendar?

- ◯ Yes
- ◯ No
- ◯ Unsure

F17 Are various types of discussion-based and operational exercises included annually?

- ◯ Yes
- ◯ No

F18 Please provide examples

_____

F19 Are these multi-agency exercises?

- ◯ Yes
- ◯ No

F20 Do exercises involve the public, communities and/ or private sector?

- ◯ Yes
- ◯ No

F21 Are all exercises coordinated by a planning team?

- ◯ Yes
- ◯ No

F22 Are After Actions Reviews conducted?

- ◯ Yes
- ◯ No

F23 What training venues are available within SESU or partner organisations?

- ☐ National training centre
- ☐ Regional training centres
- ☐ Local training centres
- ☐ Red Cross training centres
- ☐ Academic institutions
- ☐ Live exercise areas
- ☐ Simulation exercise areas
- ☐ UAF training venues
- ☐ Specialist training areas

F24 Please discuss locations and general overview of facilities

_____

F25 Please list SESU instructor/ trainer capabilities

- ☐ Breathing Apparatus
- ☐ CBRNe
- ☐ Demining/ UXO
- ☐ Driving
- ☐ Firefighting
- ☐ Fire safety- community
- ☐ Fire safety- engineering
- ☐ Flood response
- ☐ HazMat
- ☐ Health and Safety
- ☐ High Volume Pumping
- ☐ Incident command
- ☐ Incident command- virtual simulation/ reality
- ☐ Leadership
- ☐ Mountain Rescue
- ☐ Physical and psychological welfare
- ☐ Recruit induction
- ☐ Rescues from Height
- ☐ Rescues from water/ mud/ ice
- ☐ RTC
- ☐ Simulation exercises
- ☐ Specialist search (land/ mountain)
- ☐ Transport-other
- ☐ Virtual reality-other
- ☐ Wildfire
- ☐ Urban Search and Rescue
- ☐ Psychological Health

F26 What is a normal pathway of a newly inducted trainee?

_____

F27 What are the total numbers of male and female SESU personnel?

_____

F28 Total male SESU personnel?

_____

F29 Total female SESU personnel?

_____

F16. Чи існує річний календар навчання?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

F17. Чи додаються до календарю практичні обговорення та оперативні начання щорічно?

- ◯ Так
- ◯ Ні

F18. Будь ласка, надайте приклади

_____

F19. Чи до цих практичних занять залучені різні підрозділи/партнерські організації?

- ◯ Так
- ◯ Ні

F20. Чи залучені до практичних занять представники громадськості, громади та/чи приватного сектору?

- ◯ Так
- ◯ Ні

F21. Чи всі практичні заняття координуються командою з планування?

- ◯ Так
- ◯ Ні

F22. Чи проводиться аналіз проведених навчань?

- ◯ Так
- ◯ Ні

F23. Які локації для тренувань є в наявності у ДСНС чи партнерських організацій?

- ☐ Національний тренінговий центр
- ☐ Регіональний тренінговий центр
- ☐ Місцевий тренінговий центр
- ☐ Тренінгові центри Червоного Хреста
- ☐ Освітні заклади
- ☐ Зони для живих тренувань
- ☐ Зони для тренувань з використанням стимуляторів
- ☐ Тренувальні місця ЗСУ
- ☐ Спеціалізовані місця тренувань

F24. Будь ласка, опишіть локації та надайте коротку інформацію стосовно можливостей

_____

F25. Будь ласка наведіть сфери компетенцій інструкторів/тренерів ДСНС

- ☐ Дихальні апарати
- ☐ Захист від зброї масового ураження
- ☐ Розміновування/нерозірвані боєприпаси
- ☐ Водіння
- ☐ Ліквідація пожеж
- ☐ Ліквідація пожеж - громада
- ☐ Ліквідація пожеж - інженерні роботи
- ☐ Реагування на повені
- ☐ Небезпечні речовини
- ☐ Здоров'я та безпека
- ☐ Потужні помпи
- ☐ Управління інцидентами
- ☐ Управління інцидентами - віртуальна симуляція/реальність
- ☐ Лідерство
- ☐ Рятувальні роботи на гірській місцевості
- ☐ Фізичне та психологічне благополуччя
- ☐ Введення в професію рекрутованих спеціалістів
- ☐ Висотні рятувальні работи
- ☐ Рятувальні роботи на воді/бруд/лід
- ☐ Годинник реального часу
- ☐ Вправи з використанням симулятору
- ☐ Пошук спеціалістів (суша/гори)
- ☐ Транспортне сполучення
- ☐ Віртуальна реальність - інше
- ☐ Лісові пожежі
- ☐ Пошуково-рятувальні роботи в місті
- ☐ Психологічне здоров'я

F26. Яким чином зазвичай вводяться до професії стажери?

_____

F27. Яка загальна кількість співробітників чоловічої і жіночої статі працює в ДСНС?

_____

F28. Яка загальна кількість співробітників чоловічої статі?

_____

F29. Яка загальна кількість співробітників жіночої статі?

_____

F30 What is the operational/ non-operational breakdown?

F31 How has the conflict affected training?

F32 Are these impacts documented?

- ◯ Yes
- ◯ No

F33 What type of training adaptations have been put in place, if any?

F34 In your opinion should training continue as normal or pause until effective training can resume?

- ◯ Continue as normal
- ◯ Pause

F34 Please explain your response

F35 What new training subject areas have been introduced since the conflict started?

F36 What training modes or resources have proved useful for SESU personnel over the last several months?

F37 Has there been any international assistance for training and/ or operations?

- ◯ Yes
- ◯ No
- ◯ Unsure

F38 If yes, please remark

F39 Does SESU have accreditation for any of their training?

F40 Please provide detail.

G1 Does the SESU have an Incident Command or Incident Management System (ICS/ IMS)?

- ◯ Yes
- ◯ No

G2 If Yes, what is the format and structure of this system?

G3 Is it aligned with any international standards?

- ◯ Yes
- ◯ No
- ◯ Unsure

G4 If yes, please provide detail

G5 If not, how are incidents managed?

G6 Is the IMS dedicated to SESU only or is there a national IMS for a multi-agency approach?

G7 What is the role of the Ministry within IMS and major incident and/ or disaster coordination?

G8 Is specific technical IMS training provided?

- ◯ Yes
- ◯ No
- ◯ Unsure

G9 Is specific non-technical training IMS training provided?

- ◯ Yes
- ◯ No
- ◯ Unsure

G10 In your opinion where are the gaps (if any) in SESU IMS?

G11 How has the conflict impacted on IMS?

G12 Please list any other agencies involved in IMS?

- ☐ Emergency Medical Services
- ☐ Red Cross
- ☐ UAF
- ☐ Option 4
- ☐ Option 5
- ☐ Option 6
- ☐ Option 7
- ☐ Option 8

F30. Якою є оперативна/неоперативна розбивка?

F31. Яким чином військові дії вплинули на навчання?

F32. Чи такі впливи документуються?

- ◯ Так
- ◯ Ні

F33. Чи були застосовані якісь нововведення до навчання через початок конфлікту? Якщо так, то які саме?

F34. Як Ви гадаєте, чи повинно навчання продовжуватися, як раніше, або зщагалі має бути призупинено, поки не з'явиться можливість поновити його?

- ◯ Продовжується, як раніше
- ◯ Призупинено

F34. Будь ласка, поясніть свою відповідь

F35. Які нові сфери знань/навичок були додані до навчання з початком воєнних дій?

F36. Які орежими тренувань чи ресурси виявилися корисними для працівників ДСНС протягом останніх декількох місяців?

F37. Чи надавалася якась міжнародна допомога в ході навчання та/чи оперативної роботи?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

F38. Якщо так, будь ласка, вкажіть, яка саме

F39. Чи ДСНС має акредитацію для навчань?

F40. Будь ласка, надайте детальну інформацію

G1. Чи має ДСНС систему упавління інцидентами?

- ◯ Так
- ◯ Ні

G2. Якщо так, яким є формат та структура цієї системи?

G3. Чи ся система відповідає міжнародним стандартам?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

B4. Якщо так, будь ласка, надайте детальну інформацію

G5. Якщо ні, яким чином відбувається управління інцидентами?

G6. Чи інформаційна система управління налаштована для користування виключно ДСНС чи існує загальнонаціональна інформаційна система управління для мульти-організаційного підходу?

G7. В чому полягає роль МНС в системі інформаційного управління та координування діяльності, спрямованої на усунення надзвичайних ситуацій/катастроф?

G8. Чи надається спеціальне технічне навчання?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

G9.Чи передбачено спеціальне нетехнічне навчання навчання з управління інцидентами?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

G10. На вашу думку, в яких місцях є пробіли (якщо вони є) в системі управління інцидентами ДСНС?

G11. Яким чином нинішня війна вплинула на систему управління інцидентами?

G12. Будь ласка, наведіть будь які інші служби, які залучені до системи управління інцидентами?

- ☐ Служби швидкої медичної допомоги
- ☐ Червоний Хрест
- ☐ ЗСУ
- ☐ Варіант 4
- ☐ Варіант 5
- ☐ Варіант 6
- ☐ Варіант 7
- ☐ Варіант 8

G13 Does SESU and UAF have formal Civ-Mil SOPs or similar?

- ◯ Yes
- ◯ No
- ◯ Unsure

G14 If yes, please outline

_____

G15 Does SESU or the Ministry have any formal arrangements with international response or search and rescue organisations?

- ◯ Yes
- ◯ No
- ◯ Unsure

G16 Please outline organisations and arrangements.

_____

G17 Please provide a general rating of SESU Incident Management	1	2	3
Please rate	◯	◯	◯

H1 Are there Emergency Operations Centres?

- ◯ Yes
- ◯ No

H2 Please discuss facilities, communications systems and infrastructure.

_____

H3 Is there a national EOC?

- ◯ Yes
- ◯ No
- ◯ Unsure

H4 Are there regional/ satellite EOCs?

- ◯ Yes
- ◯ No
- ◯ Unsure

H5 Please provide an overview of their facilities?

_____

H6 Are there vehicle-based EOCs/ Incident Support Units?

- ◯ Yes
- ◯ No
- ◯ Unsure

H7 What is the communications infrastructure nationally for SESU?

_____

H8 Rate it's effectiveness please.	1	2	3
Please rate	◯	◯	◯

H9 Have emergency operations centres changed as a result of the conflict?

- ◯ Yes
- ◯ No

H10 How and why have they changed?

_____

H11 What changes have been made?

- ☐ Technical equipment
- ☐ Networks
- ☐ Assets eg. radios and equipment
- ☐ Satellite comms
- ☐ EOC number increase
- ☐ Change in structure and coordination
- ☐ All

H12 Rate the effectiveness of EOCs and their structure before the conflict	1	2	3
Please rate	◯	◯	◯

H13 Please explain your rating

_____

-

H14 Rate the effectiveness of EOCs and their structure now	1	2	3
Please rate	◯	◯	◯

H15 Please explain your rating

_____

I1 Does SESU have a formal and structured supply chain management system?

- ◯ Yes
- ◯ No
- ◯ Unsure

I2 Does SESU have dedicated personnel or a department for SCM/ logistics?

- ◯ Yes
- ◯ No
- ◯ Unsure

G13. Чи мають ДСНС та ЗСУ формальну цифільно-військову стандартну операційну процедуру чи щось подібне?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

G14. Якщо так, будь ласка, зазначте яку

_____

G15. Чи ДСНС або МНС мають укладені договори про співпрацю з міжнародними організаціями, чия діяльність спрямована на реагування на надзвичайні ситуації чи пошуково-рятувальні роботи?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

G16. Будь ласка, зазначте, які це саме орагнізації/домовленості про співпрацю.

_____

G17.Будь ласка, надайте загальну оцінку управлінню інцидентами ДСНС?	1	2	3
Будь ласка, оцініть	◯	◯	◯

H1. Чи є в наявності надзвичайні оперативні центри ?

- ◯ Так
- ◯ Ні

H2. Будь ласка, дайте відгук стосовно приміщень, комунікації та інфраструктури.

_____

H3. Чи маєте надзвичайний оперативний національного рівня?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

H4. Чи маєте регіональні надзвичайні оперативні центри/центри-сателіти?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

H5. Будь ласка, надайте відгук стосовно можливостей (приміщень) таких центрів

_____

H6. Чи маєте мобільні надзвичайні оперативні центри/рятувальні підрозділи реагування на інциденти?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

H7. Якою є комунікаційна інфраструктура на національному рівні для підтримки діяльності ДСНС?

_____

H8. Будь ласка, оцініть її ефективність	1	2	3
Будь ласка, оцініть	◯	◯	◯

H9. Чи змінились якимось чином надзвичайні операційні центри з початком воєнних дій?

- ◯ Так
- ◯ Ні

H10. Яким чином і чому вони змінилися?

_____

H11. Які саме зміни було запроваджено?

- ☐ Технічне обладнання
- ☐ Мережі
- ☐ Матеріальні ресурси напр. рації та обладнання
- ☐ Спутникові комунікації
- ☐ Збільшення кількості надзичайних центрів реагування
- ☐ Зміни в структурі та координація
- ☐ Всі

H12. Оцініть ефективність надзвичайних операційних центрів та їх структури до війни?	1	2	3
Будь ласка, оцініть	◯	◯	◯

H13. Яким чином регулюється діяльність ДСНС (на законодавчому рівні)?

_____

B14. Яким чином регулюється діяльність ДСНС (на законодавчому рівні)?

B14. Яким чином регулюється діяльність ДСНС (на законодавчому рівні)?	1	2	3
B005. Яким чином регулюється діяльність ДСНС (на законодавчому рівні)?	◯	◯	◯

B15. Будь ласка поясніть свою оцінку

_____

I1. Чи має ДСНС формалізовану структуровану систему управління ланцюгами поставок?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

I2. Чи має ДСНС спеціально призначений персонал чи підрозділ, який займається управлінням ланцюгами поставок/логістикою?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

I3 Please elaborate

I4 Please rate the capability of the SCM in SESU

Please rate

	1	2	3
	◯	◯	◯

I5 Please explain your rating

I6 How has the conflict impacted on supply chain and logistics?

I7 Have changes been made to accommodate these impacts?

- ◯ Yes
- ◯ No
- ◯ Unsure

I8 Please explain the changes.

I9 In your opinion, what are the main issues?

I10 Can you propose any solutions and/ or interventions?

J1 Does SESU have large venues for mass shelter?

- ◯ Yes
- ◯ No

J2 Are these geographically structured?

- ◯ Yes
- ◯ No
- ◯ Unsure

J3 How many people can they cater for in total?

J4 Please rate the following external capabilities pre-conflict	1	2	3
CBRNe	◯	◯	◯
Chemical Weapons Handling and Sampling	◯	◯	◯
Communications	◯	◯	◯
Confined Space	◯	◯	◯
Humanitarian- Evacuation	◯	◯	◯
Humanitarian- WASH	◯	◯	◯
Humanitarian- Shelter	◯	◯	◯
Firefighting- Urban	◯	◯	◯
Firefighting- Industrial	◯	◯	◯
Firefighting- Wildfire	◯	◯	◯
Transport- Aviation	◯	◯	◯
Transport- Marine	◯	◯	◯
Transport- Rail	◯	◯	◯
Transport- Road	◯	◯	◯
Trauma Care	◯	◯	◯
UAV/ Drone Ops	◯	◯	◯
Urban Search and Rescue	◯	◯	◯
Water Rescue and Flood Response	◯	◯	◯
UXO/ Demining	◯	◯	◯
Working at Height/ Rope Rescue	◯	◯	◯

J4 Please rate the following external capabilities in-conflict	1	2	3
CBRNe	◯	◯	◯
Chemical Weapons Handling and Sampling	◯	◯	◯
Communications	◯	◯	◯
Confined Space	◯	◯	◯
Humanitarian- Evacuation	◯	◯	◯
Humanitarian- WASH	◯	◯	◯
Humanitarian- Shelter	◯	◯	◯
Firefighting- Urban	◯	◯	◯
Firefighting- Industrial	◯	◯	◯
Firefighting- Wildfire	◯	◯	◯
Transport- Aviation	◯	◯	◯
Transport- Marine	◯	◯	◯
Transport- Rail	◯	◯	◯

I3 Будь ласка, надайте детальнішу інформацію

I4.Будь ласка, оцініть потужнсіть системи управління ланцюгами постаок в ДСНС

Будь ласка, оцініть

	1	2	3
	◯	◯	◯

I5. Будь ласка, поясніть свою оцінку

I6. Яким чином війна вплинула на ланцюг поставок і логістику?

I7. Чи було внесено зміни в цю систему з урахуванням обставин воєнного часу?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

I8. Поясніть, які зміни було запроваджено

I9. Які проблеми на вашу думку є найсерьйознішими?

I10. Чи можете запропонувати якісь рішення/конкретні дії?

J1. Чи має ДСНС великі приміщення для масоого прихистку?

- ◯ Так
- ◯ Ні

J2. Чи такі приміщення територіально структуровані?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

J3. На яку кількість людей вони розраховані?

J4. Будь ласка, оцініть зовнішні можливості стосовно наведених нижче параметрів до початку війни	1	2	3
Захист від зброї масового ураження	◯	◯	◯
Реагування на ураження хімічною зброєю та семплінг	◯	◯	◯
Комунікація	◯	◯	◯
Замкнений простір	◯	◯	◯
Гуманітарні аспекти: евакуація	◯	◯	◯
Гуманітарні аспекти: вода, санітарія та гігієна	◯	◯	◯
Гуманітарні аспекти: прихисток	◯	◯	◯
Ліквідація пожеж: місто	◯	◯	◯
Ліквідація пожеж: промислова зона	◯	◯	◯
Ліквідація пожеж: лісова пожежа	◯	◯	◯
Транспортне сполучення - авіа	◯	◯	◯
Транспортне сполучення - водне	◯	◯	◯
Транспортне сполучення - залізничне	◯	◯	◯
Транспортне сполучення - сухопутне	◯	◯	◯
Лікування травм	◯	◯	◯
Професійне управління БПЛА	◯	◯	◯
Пошуково-рятувальні роботи в місті	◯	◯	◯
Рятувальні роботи на воді, реагування, мінімізація та ліквідація наслідків повені та паводків	◯	◯	◯
Нерозірвані боєприпаси/ Розміновування	◯	◯	◯
Висотні роботи/рятувальні роботи з евакуацією по вертикальній мотузці	◯	◯	◯

J4. Будь ласка, оцініть зовнішні можливості стосовно наведених нижче параметрів під час війни	1	2	3
Захист від зброї масового ураження	◯	◯	◯
Реагування на ураження хімічною зброєю та семплінг	◯	◯	◯
Комунікація	◯	◯	◯
Замкнений простір	◯	◯	◯
Гуманітарні аспекти: евакуація	◯	◯	◯
Гуманітарні аспекти: вода, санітарія та гігієна	◯	◯	◯
Гуманітарні аспекти - прихисток	◯	◯	◯
Ліквідація пожеж - місто	◯	◯	◯
Ліквідація пожеж - промислова зона	◯	◯	◯
Ліквідація пожеж - лісова пожежа	◯	◯	◯
Транспортне сполучення - авіа	◯	◯	◯
Траспортне сполучення - водне	◯	◯	◯
Транспортне сполучення - залізничне	◯	◯	◯

Transport- Road	◯	◯	◯
Trauma Care	◯	◯	◯
UAV/ Drone Ops	◯	◯	◯
Urban Search and Rescue	◯	◯	◯
Water Rescue and Flood Response	◯	◯	◯
UXO/ Demining	◯	◯	◯
Working at Height/ Rope Rescue	◯	◯	◯

J5 Please allude to any differences in your ratings and provide explanations

_____

J6 Please rate the following internal capabilities, pre-conflict	1	2	3
community fire safety	◯	◯	◯
community engagement- general	◯	◯	◯
emergency and disaster planning	◯	◯	◯
leadership	◯	◯	◯
volunteer engagement	◯	◯	◯
training and development	◯	◯	◯
emergency operations centres	◯	◯	◯
health and safety	◯	◯	◯
career progression	◯	◯	◯
partnership working	◯	◯	◯
regional coordination	◯	◯	◯
international coordination	◯	◯	◯
Psychological health	◯	◯	◯

J7 Please rate the following internal capabilities, in-conflict	1	2	3
community fire safety	◯	◯	◯
community engagement- general	◯	◯	◯
emergency and disaster planning	◯	◯	◯
leadership	◯	◯	◯
volunteer engagement	◯	◯	◯
training and development	◯	◯	◯
emergency operations centres	◯	◯	◯
health and safety	◯	◯	◯
career progression	◯	◯	◯
partnership working	◯	◯	◯
regional coordination	◯	◯	◯
international coordination	◯	◯	◯

J8 Please allude to any differences in your ratings and provide explanations

_____

K1 Did SESU engage and train with voluntary agencies pre-conflict?

- ◯ Yes
- ◯ No
- ◯ Unsure

K2 If yes, please discuss

_____

K3 What type of activities?

_____

K4 Numbers of volunteers involved?

_____

K6 In the current situation, does SESU continue to engage with voluntary organisations?

- ◯ Yes
- ◯ No
- ◯ Unsure

K7 Please discuss any differences since before the conflict.

_____

K8 Have the numbers of volunteers changed, how many + or - ?

_____

K9 Does SESU have a volunteer policy?

- ◯ Yes
- ◯ No
- ◯ Unsure

Транспортне сполучення - сухопутне	◯	◯	◯
Лікування травм	◯	◯	◯
Професійне управління БПЛА	◯	◯	◯
Пошуково-рятувальні роботи в місті	◯	◯	◯
Рятувальні роботи на воді, реагування, мінімізація та ліквідація наслідків повені та паводків	◯	◯	◯
Нерозірвані боєприпаси/ Розмінування	◯	◯	◯
Висотні роботи/рятувальні роботи з евакуацією по вертикальній мотузці	◯	◯	◯

J5.Будь ласка, поясніть різницю між вашими оцінками зовнішніх можливостей до і під час війни.

_____

J6. Будь ласка, оцініть внутрішні можливості, які наедені нижче, станом до початку війни	1	2	3
Пожежна безпека громади	◯	◯	◯
Залученість громади на загальном рівні	◯	◯	◯
Планування реагування на надзвичайні ситуації та катастрофи	◯	◯	◯
Лідерство	◯	◯	◯
Залучення волонтерів	◯	◯	◯
Навчання та розвиток	◯	◯	◯
Надзвичайні оперативні центри	◯	◯	◯
Здоров'я і безпека	◯	◯	◯
Кар'єрне зростання	◯	◯	◯
Партнерська співпраця	◯	◯	◯
Координування на рівні регіонів	◯	◯	◯
Міжнародне координування	◯	◯	◯
Психологічне здоров'я	◯	◯	◯

В7. Будь ласка, оцініть внутрішні можливості, які наведено нижче, під час війни	1	2	3
Пожежна безпека громади	◯	◯	◯
Залученість громадськості на загальном рівні	◯	◯	◯
Планування реагування на надзвичайні ситуації та катастрофи	◯	◯	◯
Лідерство	◯	◯	◯
Залучення волонтерів	◯	◯	◯
Навчання та розвиток	◯	◯	◯
Надзвичайні оперативні центри	◯	◯	◯
Здоров'я і безпека	◯	◯	◯
Кар'єрне зростання	◯	◯	◯
Партнерська співпраця	◯	◯	◯
Координування на рівні регіонів	◯	◯	◯
Міжнародне координування	◯	◯	◯

Будь ласка, дайте відгук стосовно різниці у ваших оцінках стану речей до і після початку вторгнення відрізняється (якщо така є)

_____

В1. Чи ДСНС співпрацюала з волонтерськими організаціями до початку вторгнення?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

В2. Якщо так, будь ласка надайте детальнішу інформацію

_____

В3. Які це заходи?

_____

К4. Скільки залучено волонтерів?

_____

К6.Чи на даний момент ДСНС все ще продовжує залучати волонтерські організації до співпраці?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

К7. Будь ласка, дайте відгук стосовно різниці у ваших оцінках стану речей до і після початку вторгнення (якщо така є).

_____

К8. Чи змінилась кількість волонтерів, в якому обсязі (+ чи -)?

_____

К9. Чи має ДСНС офіційну політику співпраці з волонтерами?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

K10 Does SESU have a formal volunteer recruitment and development system?

- ◯ Yes
- ◯ No
- ◯ Unsure

K11 If yes, please describe

_____

L1 Finally, what do you think are the priorities of SESU at this time and for the immediate future?

_____

K10. Чи має ДСНС формалізовану систему рекрутування та розвитку волонтерів?

- ◯ Так
- ◯ Ні
- ◯ Не знаю

K11. Якщо так, поясніть

_____

B1. І, нарешті, яка ваша думка з приводу пріоритетів ДСНС на даний момент і в найближчому майбутньому?

_____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