



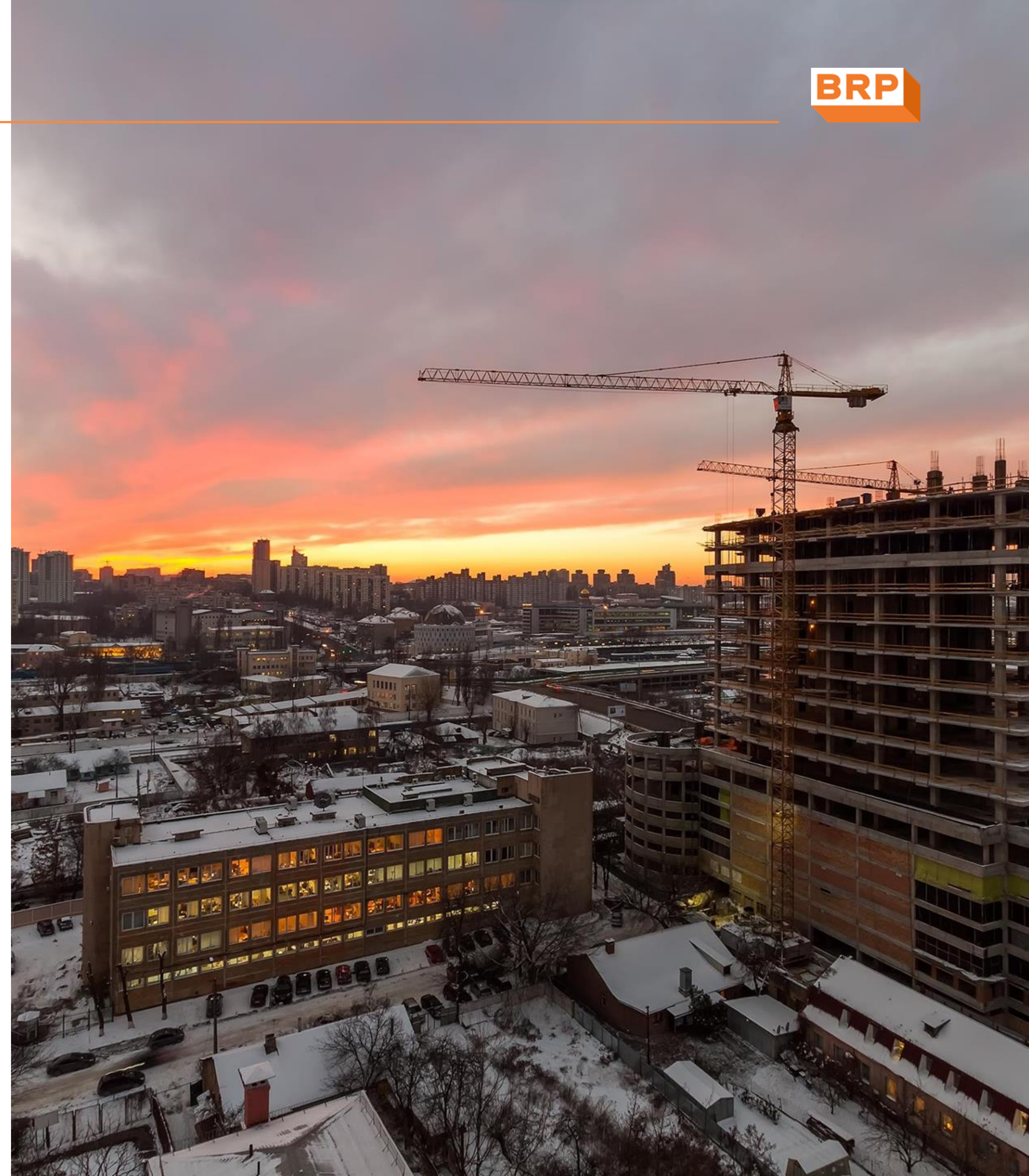
THE RECOVERY SPENDING WATCHDOG

#3, November 2023



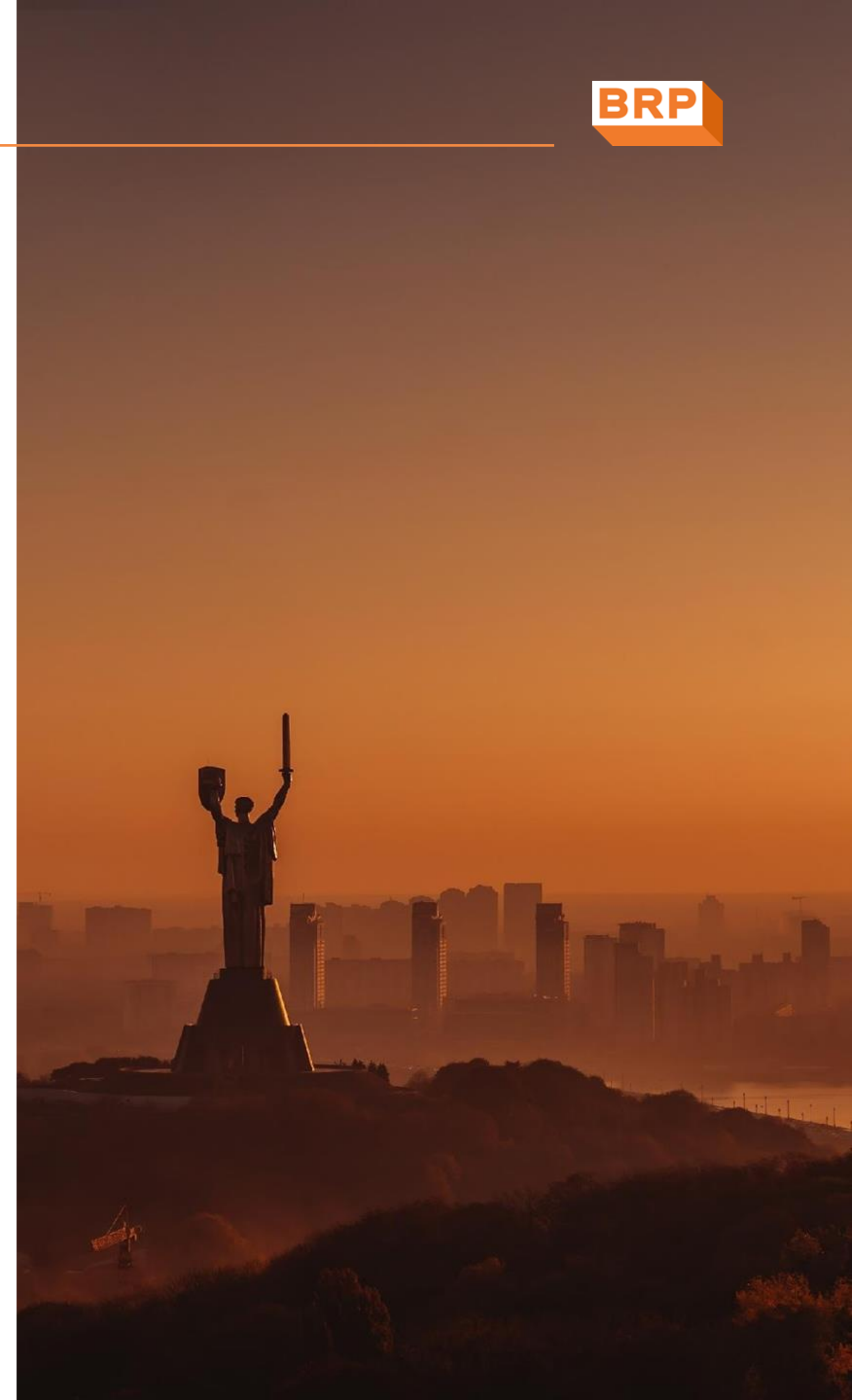
Composition

- Changes in the legislation
- Monitoring methodology
- A particular example of reconstruction: water supply
- Special topic — demining



Changes in the legislation on restoration

- Methodological recommendations on project prioritisation – order of the Ministry for Restoration
 - Resolution of CMU No. 118 on the procedure for using the funds of the Fund for the Elimination of the Consequences of Armed Aggression was adopted
- Development of the draft law on restoration and reconstruction – Ministry for Restoration within the framework of the working group
 - To establish basic terms for reconstruction and restoration
 - To establish key parties/actors
 - DREAM in the law
 - Our point of view: there shall be prioritisation, openness and transparency in the spending of cash funds for reconstruction and restoration; the main initiative shall belong to local governments, which are more aware of the local situation; public participation in developing restoration plans and programmes



The prioritisation method – as of now, only for one Fund and only recommended

Methodological recommendations on project prioritisation – order of the Ministry for Restoration

- Pursuant to CMU Resolution No. 118, they are only recommended
- Applies only to the Fund for the Elimination of the Consequences of Armed Aggression
- Establishes the approach to prioritisation: projects that were submitted primarily to the local government to get financing from the Fund for the Elimination of the Consequences of Armed Aggression
- Establishes several blocks of indicative metrics of prioritisation and their value
- The number of points shall be calculated as broken down by indicators according to the social-environmental index and the financial-economic index
- When calculating, the average number of points for submitted projects undergoing prioritisation shall be taken into account

Prioritisation method – indices and values, but certain subjectivity remains

Index	No	Criterion	Value
Social and environmental index	1.	Alignment with strategic priorities	15%
	2.	Alignment with the priority of providing assistance	25%
	3.	Alignment with sectoral priorities	10%
	4.	Support of urgent needs of communities	15%
	5.	Resettlement scale	5%
	6.	Environmental impact	7.5%
	7.	Potential contribution to mitigating the effects of climate changes	7.5%
	8.	Adaptability and resistance to climate change	7.5%
	9.	Contributing to safe and inclusive access	7.5%
Financial and economic index	1.	Number of permanent workplaces created	10%
	2.	Economic benefit	15%
	3.	Innovative potential	5%
	4.	Number of users of housing stock, public buildings and structures	10%
	5.	Number of users of infrastructure facilities related to the provision of water supply, drainage, heat energy production, heat supply, and electricity supply services	5%
	6.	Co-financing	15%
	7.	Implementation risks	40%

Full assessment of the consequences of Kakhovka dam explosion

Damage to assets for \$2.8 billion + over \$11 billion in losses¹

- 620 km² flooded as the result of Kakhovka dam explosion
- 100 thousand persons affected (some compensation was paid)
- Energy supply, drinking water supply, irrigation of agricultural land and operation of river transport were disrupted
- \$5 billion – initial assessment of total needs in renovation
- \$1.8 billion – need in cash funds for renovation activities in 2013/2014
- In particular, UAH12.6 billion – construction of the water pipeline
- The assessment of losses and the need for financing of restoration shall be clarified in the course of RDNA3 (started)



Budget approved for 2024

Cash funds for renovation from a special fund – its actual amount is more than reflected in the budget figures

- UAH12,4 billion – in planned indicators for the special fund amount, but it is less than stipulated in the agreements (see Annex)
- Part of the money shall be spent centrally, and a part – through subventions
- The role of the local government remains important
- There is money for eVidnovlennia – compensation to the population for damaged and ruined property – the World Bank's HOPE project
- There is money for reconstruction: projects of EIB, the World Bank and others
 - In particular, UAH7.9¹ billion shall be received by the Agency for Restoration from the JICA grant (the total amount of UAH21.8 billion for different purposes is not reflected neither in 2023, nor 2024 indices so far)
- There is also money from donors, which shall be forwarded for the restoration and renovation directly to local budgets and via public organisations

The funding shall depend on the ability to disburse cash funds in time and in good quality

- The absorbing capacity shall depend on the joint efforts of the government and local governments
- The role of local authorities is important both for disbursement of these funds and for attracting other financing:
 - to submit high-quality projects for funding (for example, tenders for EIB money)
 - to raise awareness of the population about the eVidnovlennia programme
 - to engage the public in drafting quality plans and reconstruction programmes
 - to cooperate with the civil society in matters of reconstruction
 - to involve specialists who know how to communicate with donors: cooperation between cities, grant funding from international partners

eVidnovlennia: money is available, contractors are needed

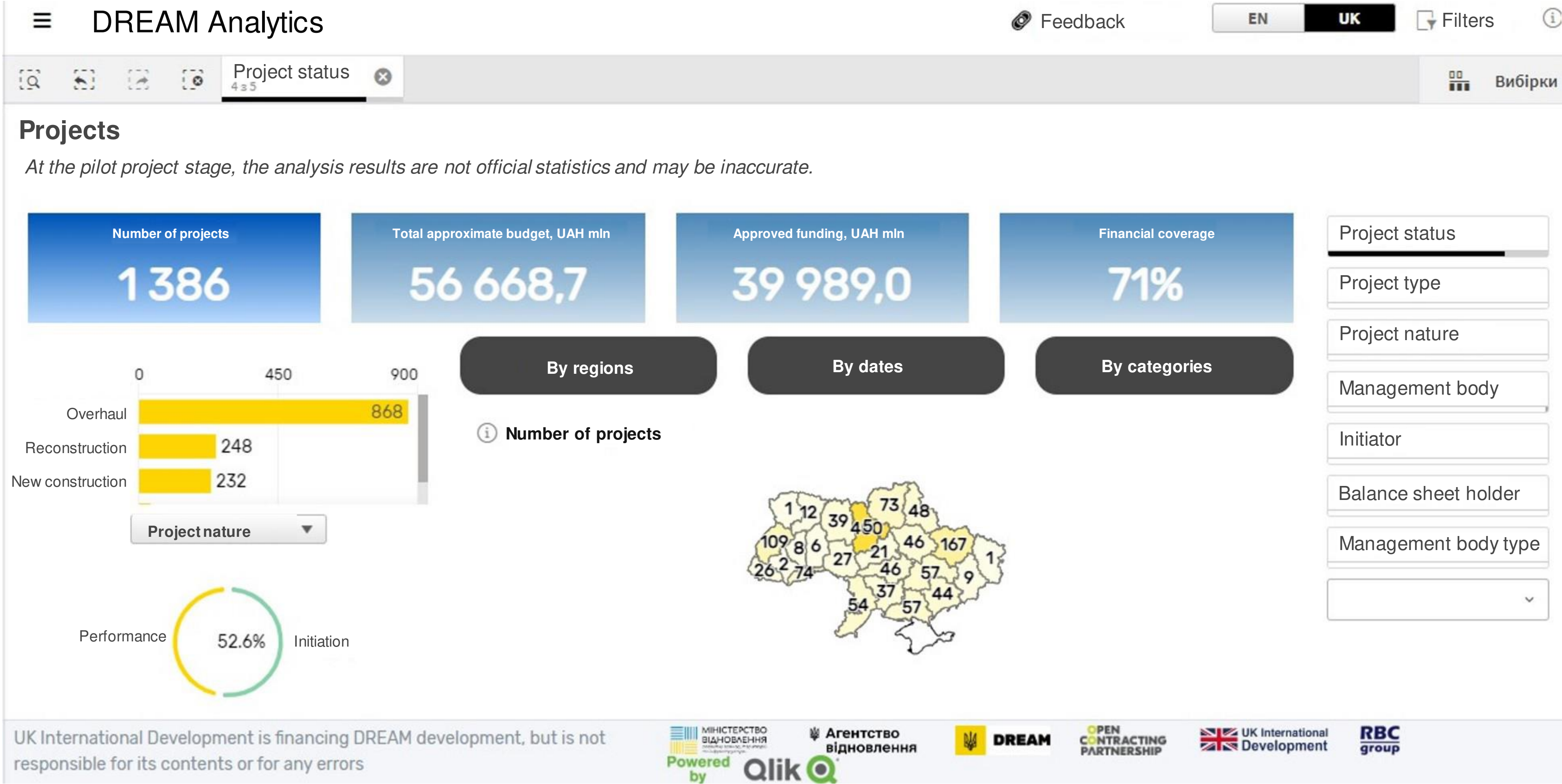
- Compensation to citizens up to UAH 200/350/500 thousand for the damaged property – UAH 1.8 billion by 10 November ¹ for 23,219 families
- Poor public awareness of the programme: the elderly, especially those without smartphones, have problems accessing it
- Local authorities in communities with significant damages and destructions complain about heavy administrative burden
- Goods and works within the limits of eVidnovlennia are provided by businesses (including individual entrepreneurs) that officially joined the programme
 - However: not all communities have a sufficient number of contractors. Consequently, prices rise above the levels adopted in the estimated calculations of compensations to be provided
- A limited list of construction materials

THEREFORE: the main challenge is between control and freedom of actions

- Local governments shall be more active in communicating to the population the availability of programmes, as well as use administrative service provision centres more to submit applications for compensation + communication on the part of the state (Suspilne, the United News)
- More information shall also encourage greater involvement of construction material sellers and contractors in the implementation of the programmes
- Consider expanding the list of construction materials (survey?)

DREAM launched public analytics module

The Tool allows finding out the total number of projects in DREAM by oblasts, raions, and communities, the budget planned for them, and the confirmed amount of funding, etc.



An example of reconstruction

*The construction of main water pipelines
Karachuniv reservoir – Kryvyi Rih – Southern
reservoir, Marhanets – Nikopol, Khortytsia
(Dniprovska WSS2) – Tomakivka*



Water supply system: construction progress as of November 2023

- **UAH12.6 billion** – general current estimate for construction pursuant to contracts with contractors signed following the tenders
- **UAH8.5 billion** – the amount of funds allocated by the Cabinet of Ministers of Ukraine for this project in 2023
- **UAH7.3 billion** was paid in favour of the construction contractors in August and October 2023 based on Spending.gov.ua data (UAH1.3 billion and UAH6 billion, respectively)
- **300 km** is the length of one line of the main water supply system “Karachuniv reservoir – Kryvyi Rih – Southern reservoir, Marhanets – Nikopol, Khortytsia (Dniprovsk WSS2) – Tomakivka”. 249 km¹, or 76%, are ready as of 10 November 2023
- **The first line** of the water supply system on the Inhulets – Southern Reservoir section **was put into operation** on 21 August 2023¹.
- For **6 pumping stations** laying of the base for the foundation on the Khortytsia – Tomakivka – Marhanets section was started

Special topic: demining

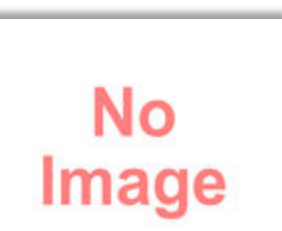


The most mined country in the world

174 thousand km² of the Ukrainian territory (almost 30%) are potentially contaminated by mines and explosive devices*



- 174 thousand km² is the total area of the following countries:



- At the same time, not all of this territory may be mined in reality, as the practice shows that only 2 to 10% of the land is really contaminated.¹
- **To determine which territories are really mined, it is necessary to invest in this work.**

The territory of Ukraine potentially contaminated with explosive devices (visualisation by Euronews.com)

According to the World Bank analysis, in various regions, **5 to 10% of contaminated lands** (13,000 km²) need technical survey, and **2–8%** need demining (9,000 km²).*

* – response of the Ministry of Economy to the request from the Centre for Economic Strategy

Main challenges at the initial stage

The area of the contaminated territory

- There is no exact assessment of Ukraine's mining
- Detailed battle map to identify the potentially contaminated territory is missing
- There is no detailed list and criteria for identifying explosive objects

Technical needs and challenges

- Quantity and type of equipment for demining
- Number of demining experts needed
- Technologies to speed up and make the process cheaper
- Source for equipment acquisition

Financial and other challenges

- Coordination of international organisations (IO) and donors to study the need and funding sources
- Most IO use historical data on the cost of demining without taking into account the specific features of Ukraine and the development of new technologies
- Regulation of the demining industry: an obstacle to speeding up and making the process cheaper



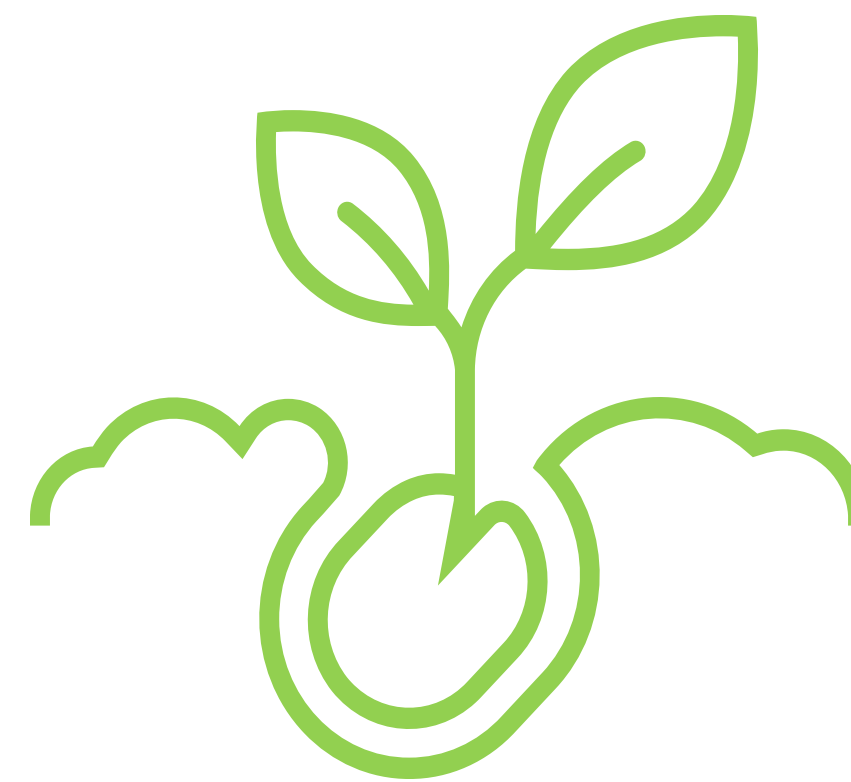
The area of potentially contaminated agricultural lands exceeds the area of Slovakia

50,000 km²



of potentially contaminated agricultural lands¹ ~ 18% of all area under agricultural crops*.

4.7 thousand km²



of lands for agricultural purposes in the liberated territories need survey and demining²

1.8 thousand km²



of agricultural lands returned to economic activity from the beginning of 2023³

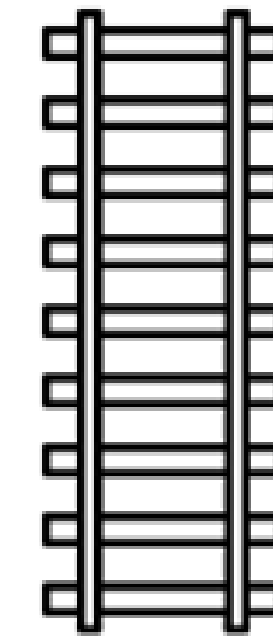
* 28.3 million ha of area under crops for the 2021 harvest based on the data of the State Statistics Service

Demining of Ukraine

(data as of 13 November 2023)¹

- Examined 37.7 thousand ha (377.7 km²)
- Destroyed > 84,000 of explosive objects

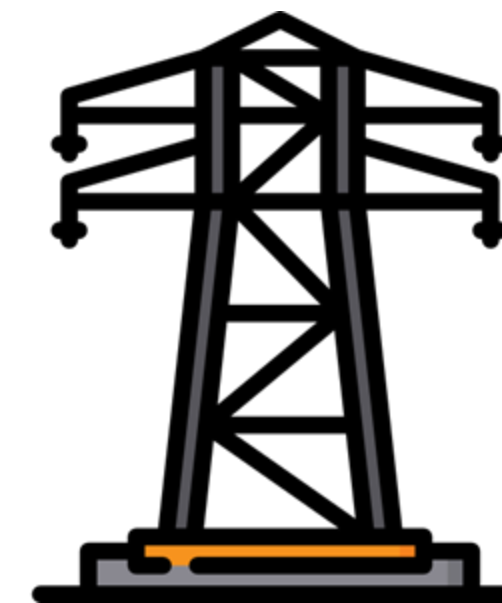
Cleared:



> 2.2
thousand km
of railways



> 700 km of
automobile
roads



> 320 km of
electricity
power grids



90.5 ha of
forests



Humanitarian demining. Background information

Clearing the area and facilities from explosive objects for the safety of the population. This includes clearing landmines, unexploded ordnance, and toxic areas.

Humanitarian demining is not only about safety and the possibility of returning people to their homes and safe movement in the territory. Humanitarian demining is the zero stage of the country's economic recovery!



Available estimates of the cost and terms of humanitarian demining

**\$38
BILLION**

Based on the World Bank's estimates¹ for the nearest 10 years (twice lower than the estimate in August 2022), of which:

- \$10 billion – for technical and non-technical survey
- \$28 billion – for demining

**\$537
BILLION**

were attracted by the Government of Ukraine from foreign partners for the demining process as of October 2023²

**≈\$800
MILLION**

will be lost annually by the economy of Ukraine due to the idling of fields³

**\$55.5
MILLION***

are offered by the Ministry of Economy to be allocated in the 2024 budget as compensation for expenses on humanitarian demining of agricultural lands

757 years (with resources available today and given the maximum possible area of contamination of 174,000 km²) – the estimated term needed to clear the territory, according to the GLOBSEC report.⁵

In reality the situation may be different.

Evaluating the cost of demining – 1,000 to 80,000 USD/ha

\$/ha	KSE ⁶	World Bank ⁷	Nibulon ³
Non-technical survey	6		640
Search	3,050		
Clearing	30,000	20,000–80,000	X
Re-cultivation			1,070
	33,056	20,000–80,000	1,710 + X

New technologies are the key tool to reduce the cost and shorten the terms

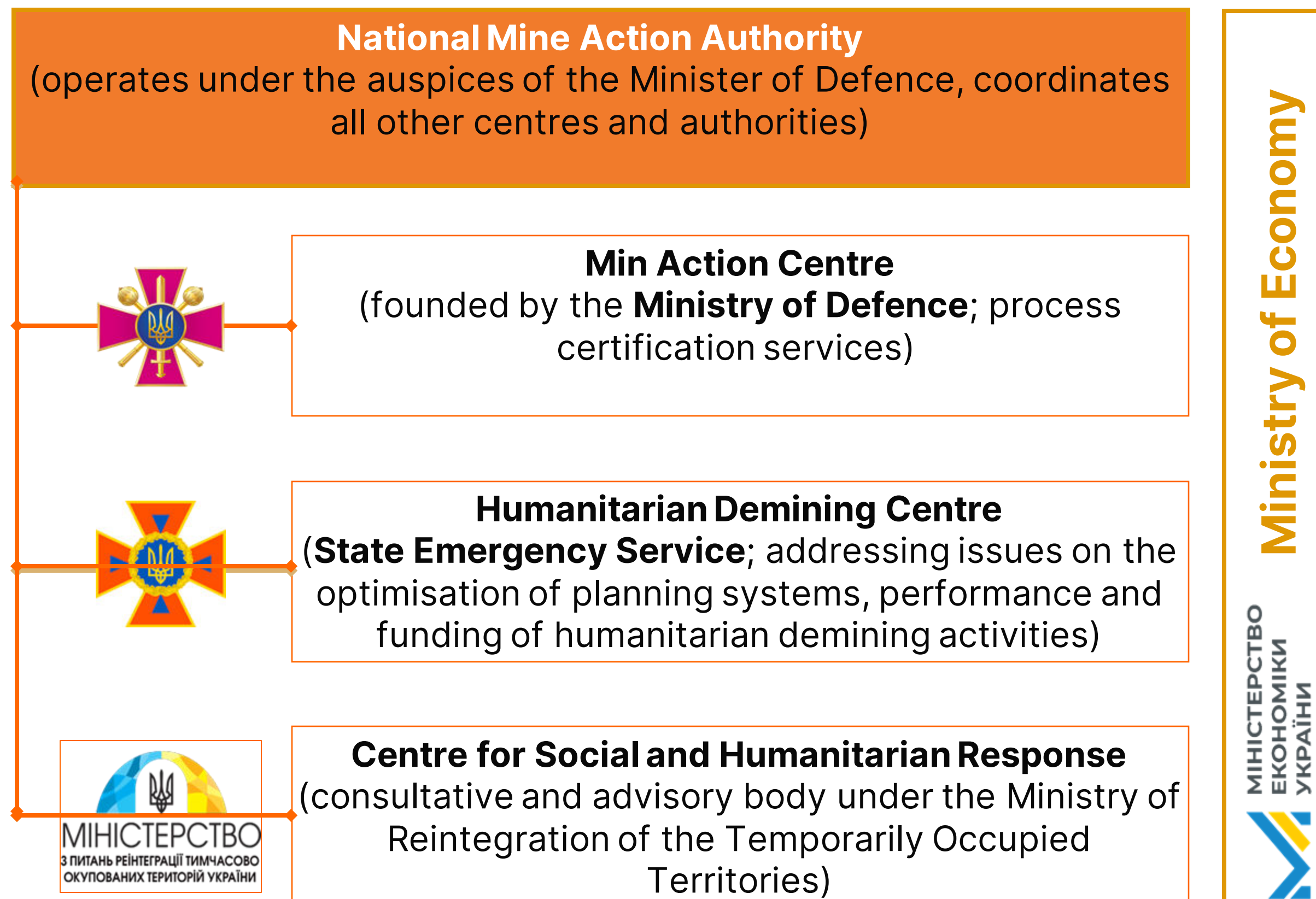
Joint development by Croatia and the UNDP with the participation of the Kyiv School of Economics (KSE) based on artificial intelligence allowed to confirm the absence of mines in the area of 5,000 km² in 6 weeks only → this will help save up to \$2 billion. ⁸ Another 50,000 ha of agricultural lands are to be examined using this method by the end of the year.

* – response of the Ministry of Economy of Ukraine to the request from the Centre for Economic Strategy

State regulation

Currently, several centres operate in Ukraine, which are involved in the demining process.

The National Mine Action Authority coordinates the activities of ministries, other executive authorities, local governments, and enterprises involved in mine action.



The Ministry of Economy takes part in the implementation of the state policy on mine action in the field of humanitarian demining, works on increasing the capacity of state institutions, involving non-governmental organisations and businesses in mine action.

The Ministry of Economy and the Ministry of Defence are jointly engaged in the certification of domestic samples of mechanised demining machines, which will be manufactured at Ukrainian enterprises.¹

State entities – units of the Armed Forces of Ukraine (AFU), the State Emergency Service, the State Security Service, the National Guard, and the National Police – are engaged in the demining of territories.²

Humanitarian demining. Needs and capacities

29 machines * for mechanised demining are at the disposal of state service divisions; most of them were provided by foreign governments and donors.

Governmental plan for the following year – **99 machines**

€0.6–1.5 M – the cost of demining machines, depending on the brand on a complete set

up to 5 ha per shift – machine performance (depending on the brand, complete set and contamination of the territory)

€140,000 – the approximate price of the first demining machine produced in Ukraine, received by the State Emergency Service in October 2023¹

> €4M will be received by Nibulon company from the German fund to purchase **4** machines

≈ 3,000 sappers * work in the fields every day: more than 1,000 are representatives of non-governmental mine action operators, and almost 2,000 are representatives of government units (State Emergency Service, State Special Transport Service, National Police of Ukraine, etc.). Plan for 2024 – **5,000 sappers**.

15 to 50 m²/per day can be demined by one sapper

* – response of the Ministry of Economy to the request from the Centre for Economic Strategy

Equipment needs for the next 10 years¹



60

Operating and pyrotechnic vehicles (for transporting personnel and equipment to the place of task performance)



178

Robotic demining complexes



118

**Pyrotechnic vehicles
Heavy type machines**
(for transporting explosive objects)



30

Special boats for demining



117

**Pyrotechnic vehicles
Light type machines**
(for transporting explosive objects)



47

Demining machines

Humanitarian demining

Who deals with it?

Today, in Ukraine, **18 mine action operators have been certified and 30 more are undergoing certification.**¹

Key players at the operators market are the following:²

- The HALO Trust
- IDG
- FSD
- DRC
- NPA
- MAG
- Demining Solutions
- FREEWAY
- Patron Demining
- Group of companies “Group”
- NIBULON
- Ukroboronservice

Mine action operators are certified by (each of them has its own list of processes):³

- Mine Action Centre of the State Special Transport Service, Chernihiv;
- Interregional Centre for Humanitarian Demining of the State Emergency Service, Merefa (in October 2023, they simplified the procedure for submitting documents and optimised their quantity);⁴
- Demining Centre of the Armed Forces of Ukraine, Kamianets-Podilskyi.



Humanitarian demining

How does demining take place now?

Demining stages:¹

1. The territory is being surveyed mainly with drones that identify explosive objects under and on the ground.
2. Obtained data is then uploaded to the software, which determines whether the identified object is dangerous.
3. If so, then this area is marked, and after that, demining works start.

Prioritisation of lands for demining is based on world experience:²

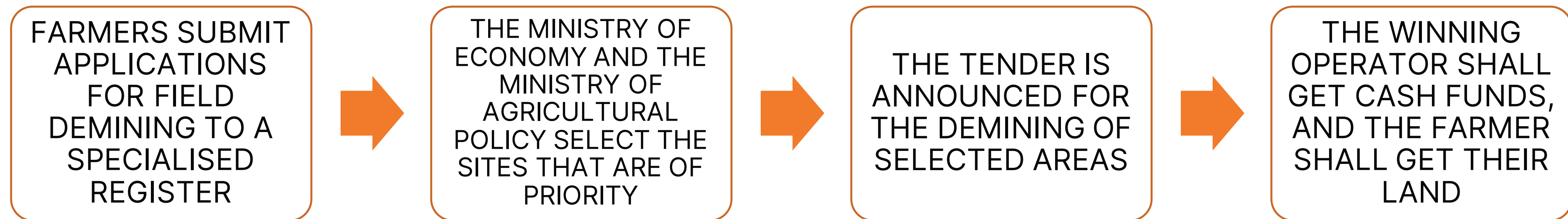
1. Critical infrastructure – roads, electricity, gas pipelines, water pipelines, etc.;
2. Safety of citizens – places where people gather to receive healthcare, social services, etc.;
3. Economically active territories – agricultural lands, territories with manufacturing facilities and factories.

The National Mine Action Authority and local authorities decide which lands shall be demined as a matter of priority.³



Humanitarian demining. How will the demining market operate?

Ukrgazbank has already launched crediting to farmers for demining fields within the framework of the “Affordable Loans 5–7–9%” programme.²



Fields for clearing will be selected based on the density of contamination and the economic feasibility. Priority:

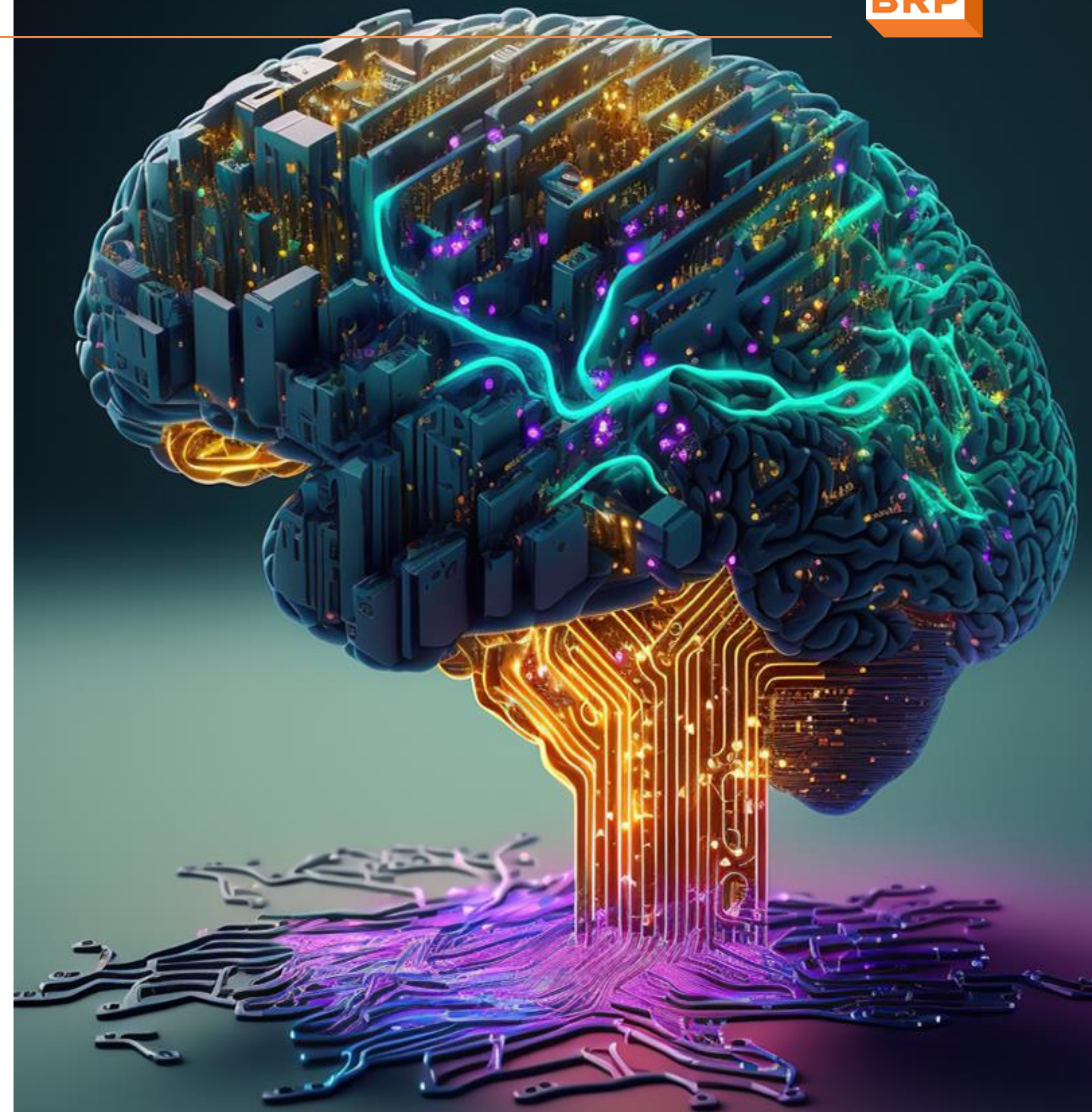
- slightly contaminated lands with perennial plantations;
- lands that are to be sown with vegetables and cucurbits.

Communities will have a voice in the course of selecting priority areas for demining.

The first tenders shall be announced in April 2024, and by that time, the Cabinet of Ministers will have approved the payment mechanism for operators' services and established what % of the demining cost will be compensated to the farmers.¹

Humanitarian demining. Artificial intelligence implementation

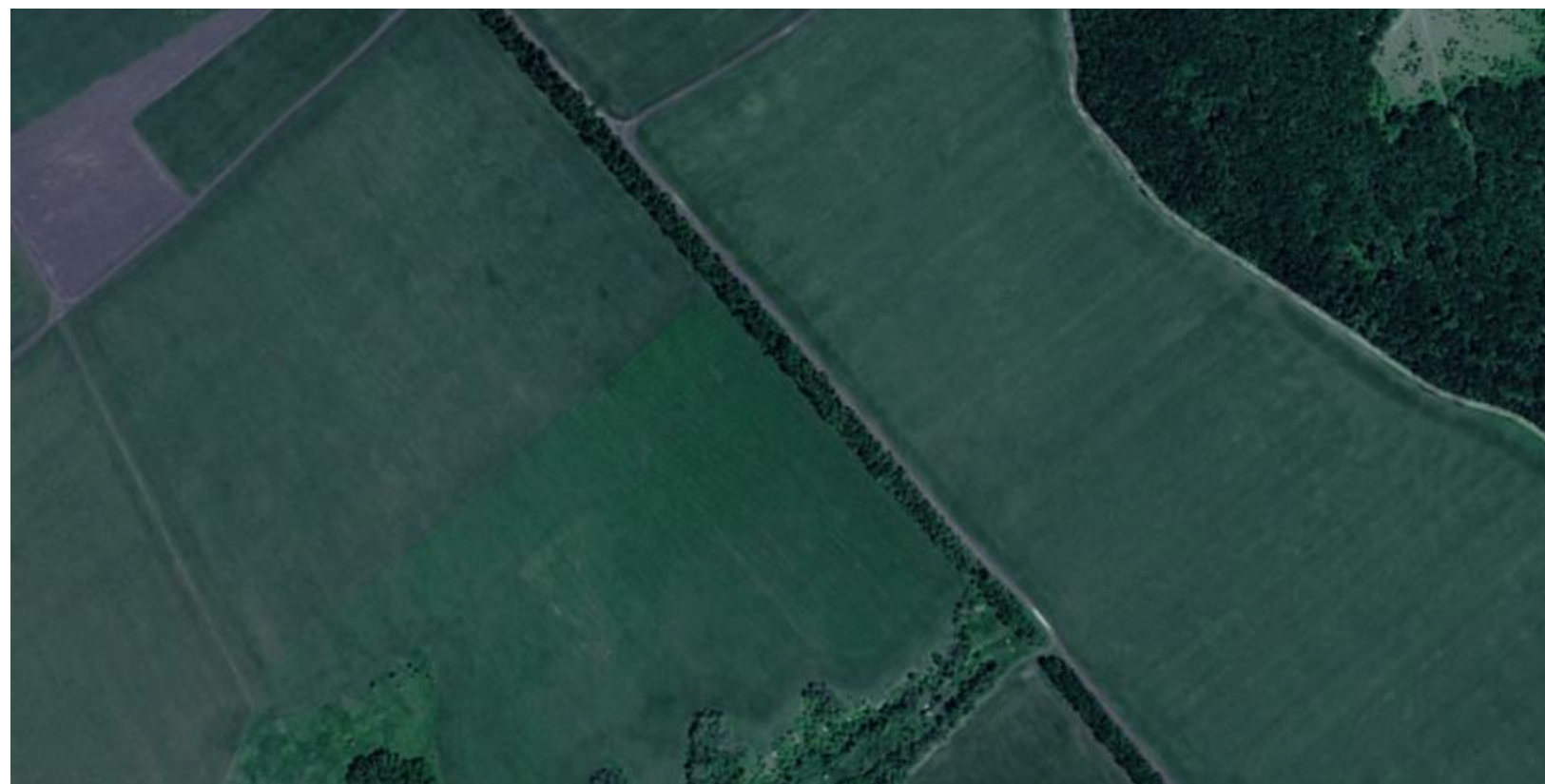
- Ministry of Economy -> Strategy of informational management for humanitarian demining of Ukraine's territory **using the data-oriented approach** (with the participation of Palantir).¹
- **Big Data** – to approve decisions, set priorities, and understand the needs and resources in order to demine **the territories as soon as possible**.
- **The AI-based system** will analyse data concerning potentially mined territories, combining it with the data from other sources (for example, regarding objects of social or critical infrastructure), and **will offer the most priority territories and methods for their demining**.²



Not just demining

Not only mines and ordnance will stand in the way to returning the land for farming. Numerous craters, thermal and chemical contamination, damaged soil and black soil that has lost its quality. Expenses on clearing and recultivation may reach hundreds of millions USD.

Fields near Izium before...



Fields near Izium now...



The Agrogeneration Company had to write off 30,000 ha of lands in Kharkiv Oblast as unsuitable for processing due to contamination and damage. It evaluates the cost of restoration of this area as **\$50M**, or \$1.67 thousand/ha.¹

Verdun, France. 100 years after WWI



Old technologies = long way

Bosnia and Herzegovina: $\approx 3,000 \text{ km}^2$ cleared since 1996.
0.9 thousand km^2 are to be cleared by 2030¹

Croatia: $13,000 \text{ km}^2$ – estimation of mined territory in Croatia in 1996. Demining lasts until this moment²

2.5 thousand km^2 have been demined in **Cambodia** in almost 3 decades³

2.2 km^2 were demined in 2022 in **Kosovo**

7,000 km^2 of the government-controlled territory in **Donbas** have required demining since 2015, 414 km^2 was cleared



Focus on the following is needed:

Investment into mining scale analysis

Accumulating funds and resources for collecting and analysing information about the scale of territory contamination: map of hostilities, types of explosive devices, potential risk, etc. Consequently, we get an understanding of the scale of contamination, planning and prioritisation of lands.

Advocacy at the EU and global levels

Creating a data collection centre on available equipment and demining experts + capacities for the production of demining equipment and machines and new technological developments.

Deregulation of the demining sphere

Involving not just international public organisations but also private Ukrainian companies => this will increase competition and lead to cheaper and faster demining.



Journalistic investigations

Disclaimer. Please keep in mind that journalistic investigations may not take into account all possible details and be biased in certain cases. It is recommended that you treat the information received with caution and not use it for final conclusions without additional research and fact-checking.

Journalistic investigations as a tool for civil control

SOURCES AND SUBJECT MATTER

- Journalistic investigations over the past month that were published on bihus.info, radiosvoboda.org, hromadske.ua and nashigroshi.org resources were screened.
- Several investigations of reconstruction projects are covered.
- The results of investigations covered Zaporizhzhia and Kyiv Oblast in terms of the response of law enforcement agencies to the journalistic investigation conducted back in the summer of 2023.

GENERAL PROBLEMS ARE PERMANENT

Insufficient transparency and lack of competitive tenders: Most of the allocated money was distributed without performing competitive tenders. Lack of competition in the tenders was exposed. Tenders were won by companies without any experience or any activity during the previous years or companies associated with local government representatives.

Overpayment for construction materials and inflated estimates: Due to inflated prices for construction materials and other equipment, the allocated funds are spent inefficiently, which leads to significant financial losses.

RESPONSE OF AUTHORITIES AND LAW ENFORCEMENT AGENCIES

Based on the results of the July publication by bihus.info about the lack of transparency during the reconstruction in Kyiv Oblast, the Economic Security Bureau and Bucha District Prosecutor's Office are investigating 5 proceedings related to the embezzlement of budget funds for the reconstruction of infrastructure facilities.

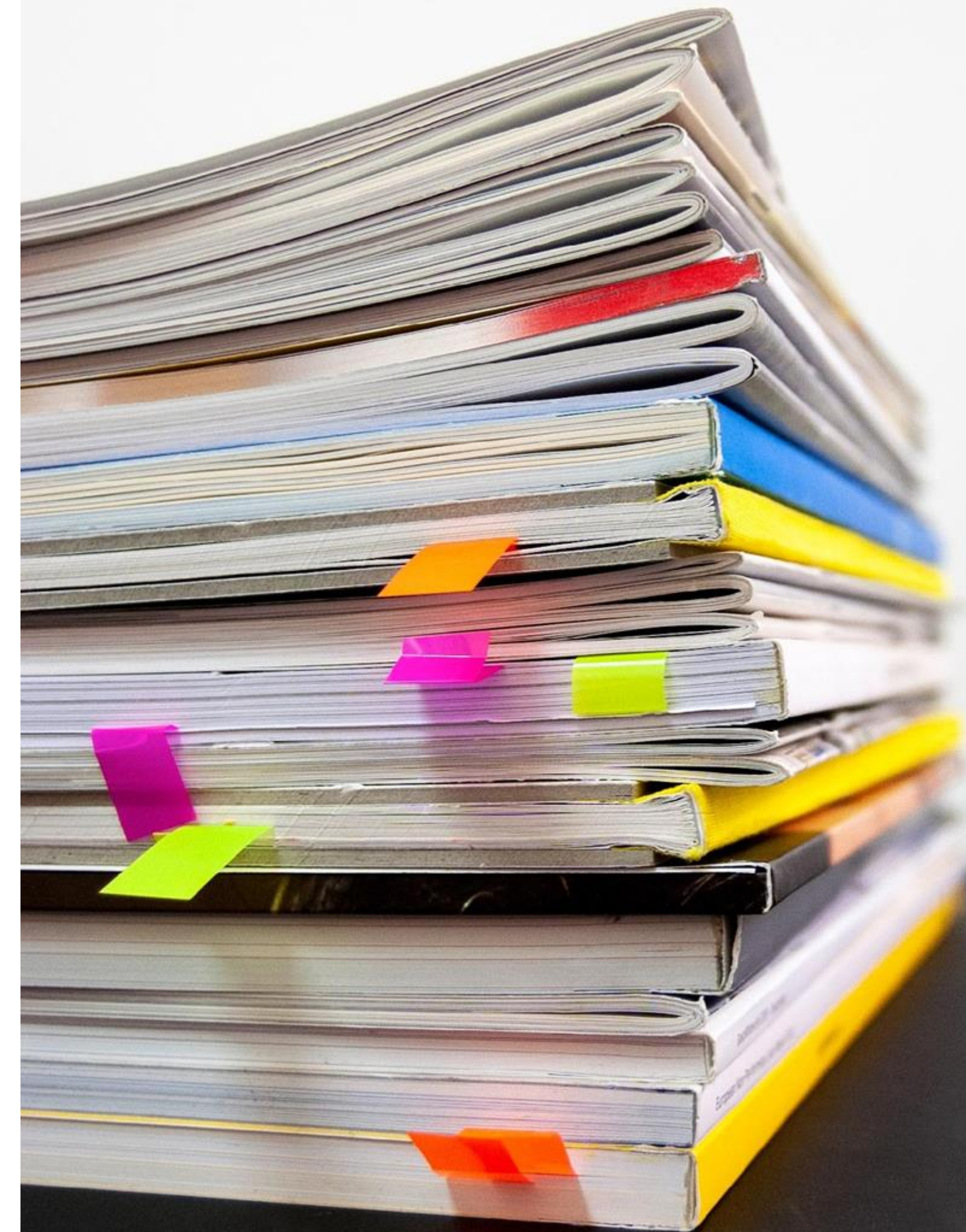
Journalistic investigations. Additional information

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Information sources used:

Bihus.Info	Law enforcement officers are investigating 5 proceedings on the embezzlement during the reconstruction after Bihus.Info's publication (the relevant articles is available at the link below)	https://bihus.info/pravoohoronczi-rozsliduyut-5-provadzhen-shhodo-roztrat-na-vidbudovi-pislya-syuzhetu-bihus-info/
Bihus.Info	Hundreds of millions of UAH for the reconstruction of buildings and infrastructure facilities destroyed by the Russians in Kyiv Oblast were distributed among defenders in the criminal proceedings, companies bought on OLX and entities whose owners or directors led journalists to the management of Kyiv Oblast State Administration and Office of the President	https://bihus.info/vidbudova-kyyvshhyny-sotni-miljoniv-gryven-viddaly-kompaniyam-z-kryminalom-i-kuplenym-na-olx/
Hromadske	\$300 thousand for an apartment: how Zaporizhia is being reconstructed	https://hromadske.ua/posts/dollar300000-za-kvartiru-yak-u-zaporizhzh-pilyayut-na-vidbudovi#tag=zaporizhzhia

Annexes



State budget approved for 2024

- In 2023, reconstruction and restoration took place substantially using the money of the Fund for the Elimination of the Consequences of Armed Aggression (total funding of the Fund – over UAH60 billion) – 50% of NBU profit (UAH35.9 billion) + Confiscated Russian assets (~UAH 25.8 billion). In 2024 – remains of the cash funds + confiscated assets (?).
- UAH12.4 billion – in the planned indicators for the special fund amount, but this is less than stipulated in the agreements with the EIB and the World Bank + UAH7.9 billion has not been provided for¹, the Agency for Recovery is supposed to get it from the JICA grant.

Manager of cash funds	Budget Programme	2024 Special Fund, UAH million
Ministry for Recovery	Implementing the project “Housing Repair for People's Empowerment” (HOPE)	82.8
Ministry for Recovery	Developing water supply and water drainage system in Mykolaiv	155.4
Ministry for Recovery	Implementing an extraordinary crediting programme for Ukraine’s recovery	13.6
Agency for Recovery	Ensuring implementation of infrastructure recovery projects under the programme “Support to Ukraine’s Fast Recovery”	3,184.0
Agency for Recovery	Repairing Essential Logistics Infrastructure and Network Connectivity (RELINC), key motorway connections	16.1
Agency for Recovery	Developing border road infrastructure on the Ukrainian-Polish border	44.4

Part of the funds for recovery will go to the local level as a subvention (the cash funds manager is the Ministry for Recovery)

Budget Programme	2023 Special fund, UAH million	Special Fund-2024, UAH million
Subventions from the state budget to local budgets for the implementation of the project "Housing Repair for People's Empowerment" (HOPE)		248.4
Subventions from the state budget to local budgets for the implementation of projects within the framework of an Extraordinary Crediting Program of Ukraine's Recovery	1,703.4	2,346.6
Subventions from the state budget to local budgets for the implementation of projects within the framework of the Programme of Ukraine's Recovery	5,292.0	4,499.0
Subvention from the state budget to the budget of Kharkiv City Consolidated Territorial Community for extending the third subway line in Kharkiv	1,517.3	722.0
Subvention from the state budget to the budget of Dnipro City Consolidated Territorial Community to complete the construction of the subway in Dnipro	4,581.7	549.1
Subvention from the state budget to local budgets for restoring critical infrastructure facilities within the framework of the joint project with the International Bank for the Reconstruction and Development Project "Urban Infrastructure Development Project – 2"	2,080.0	519.5