



**DEMINE.PRO**

## **The future of demining**

Full-cycle integrated platform for surveying, detection,  
information management and control



The pace of demining in Ukraine does not match the scale of the current challenges.

We are proposing a solution that unifies and automates the collection, processing and management of information during each stage from planning to reporting, making demining faster, safer and more transparent for state and private operators.



# Outdated methods – real risks

Currently, the process of demining is slowed down due to widespread use of obsolete methods that are inadequate for modern challenges.

**Disregard for NTS.** If non-technical survey isn't performed properly, each area ends up classified as suspected hazardous. This severely slows down operations and increases spending.

**Trajectory between desk assessment and land release is chaotic.**

Fragmented digital tools only cover specific steps, without a unified standard and seamless process. Widespread dependency on services that are online-only and “temporary” workarounds.

**No consolidated data.** Paper document flow, non-unified document schema. Errors in data, duplicates and overlap eventually cause issues with QC/QA and delay land release.





# Full cycle instead of temporary solutions

Our system assists operators during the entire demining process: from desk assessment to land-release.

Operators are freed up from routine tasks and can focus their efforts where needed.

**Preliminary planning:** Utilizing internal and external historical data for properly planning future operations.

**Non-technical survey:** Using data collected using UAVs and various sensors and geospatial data to estimate UXO contamination.

**Technical survey:** Tracking the progress of surveying and clearance operations, collection of information regarding detected and cleared UXO.

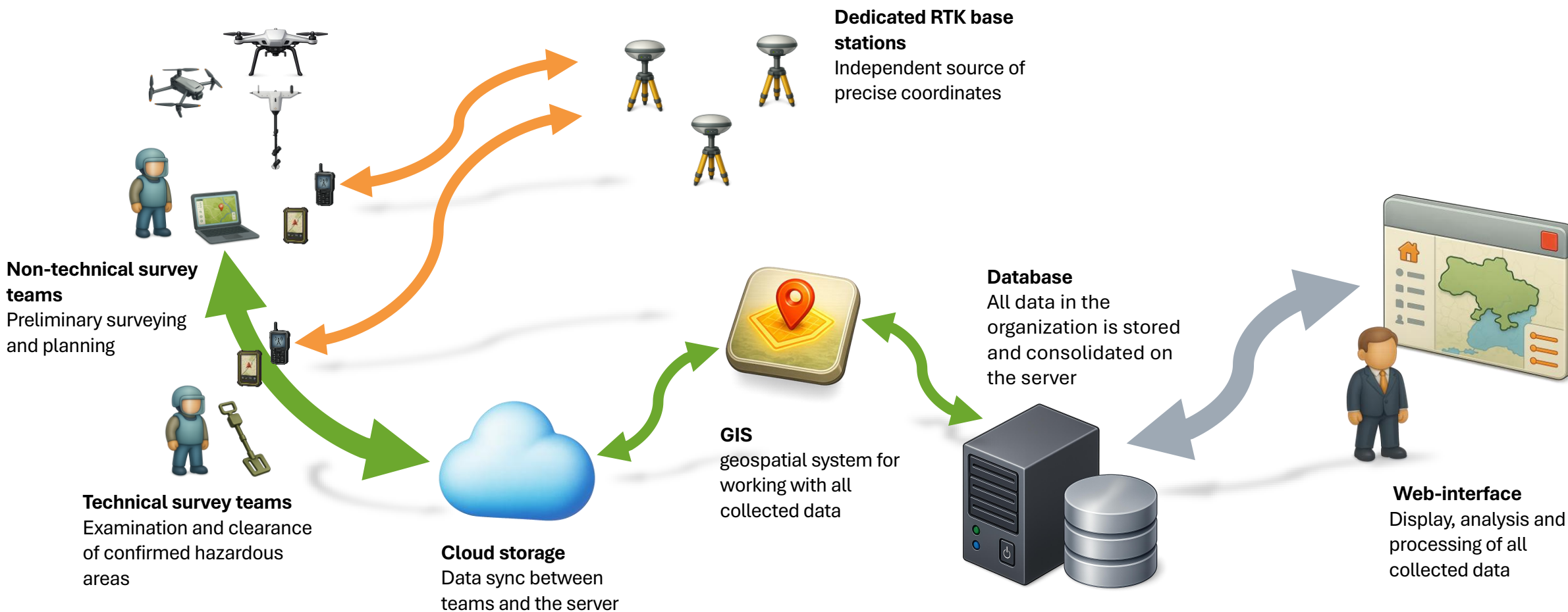
**Mechanized demining:** Route planning and tracking clearance progress.

**Quality control:** Utilizing collected data to ensure accurate assessment of results, performing additional survey operations if/where needed.

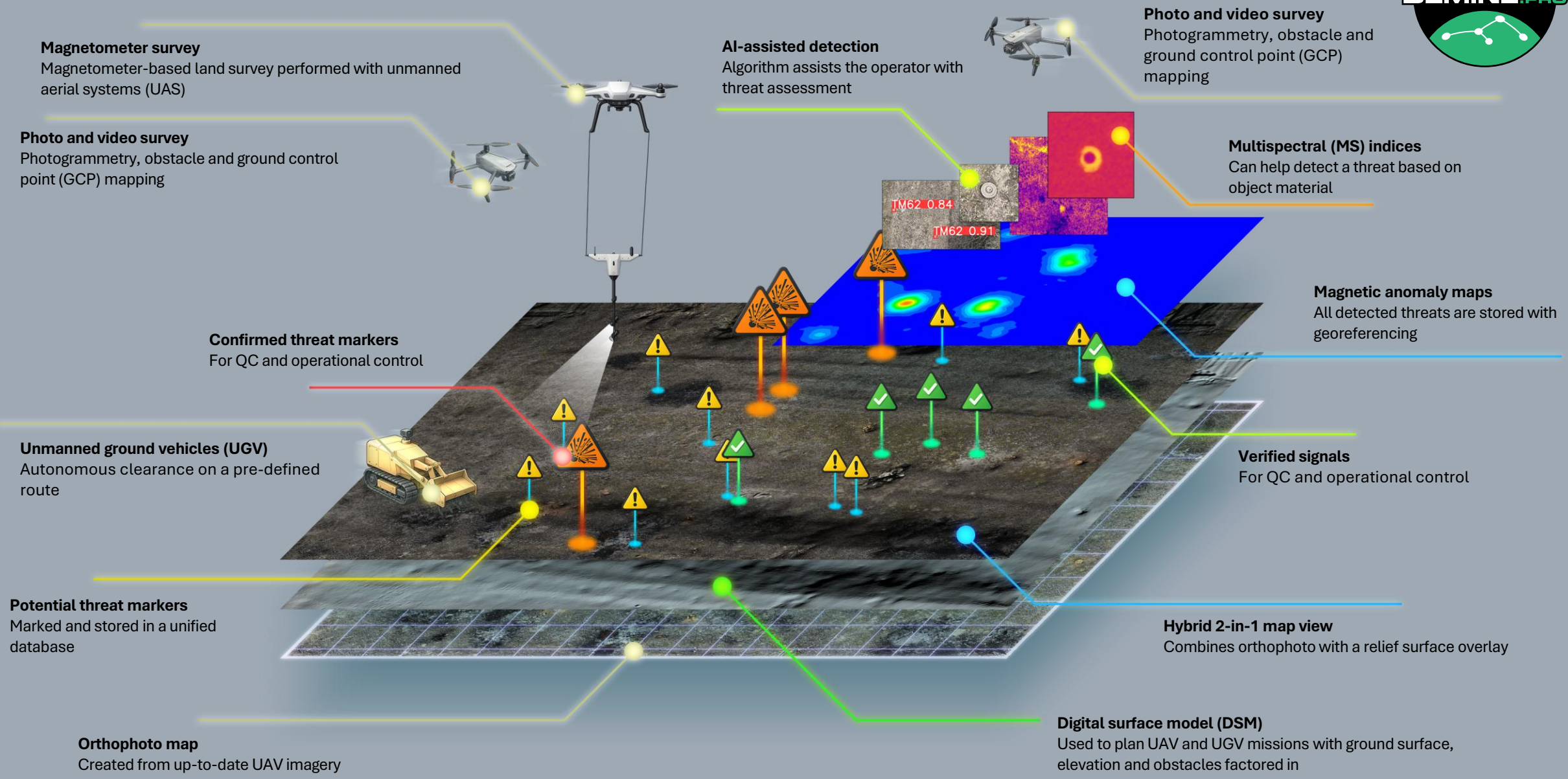
**Land release:** Automated reports generation and document flow.



# System components



# Land survey



# Aquatic survey



## Magnetometer survey

Magnetometer-based land survey performed with unmanned aerial systems (UAS)

## Photo and video survey

Photogrammetry, obstacle and ground control point (GCP) mapping

## Obstacle mapping

For mission planning

## Confirmed threat markers

For QC and operational control

## Potential threat markers

All detected magnetic anomalies are marked and stored in a unified database

## Verified signals

For QC and operational control

## Magnetic anomaly maps

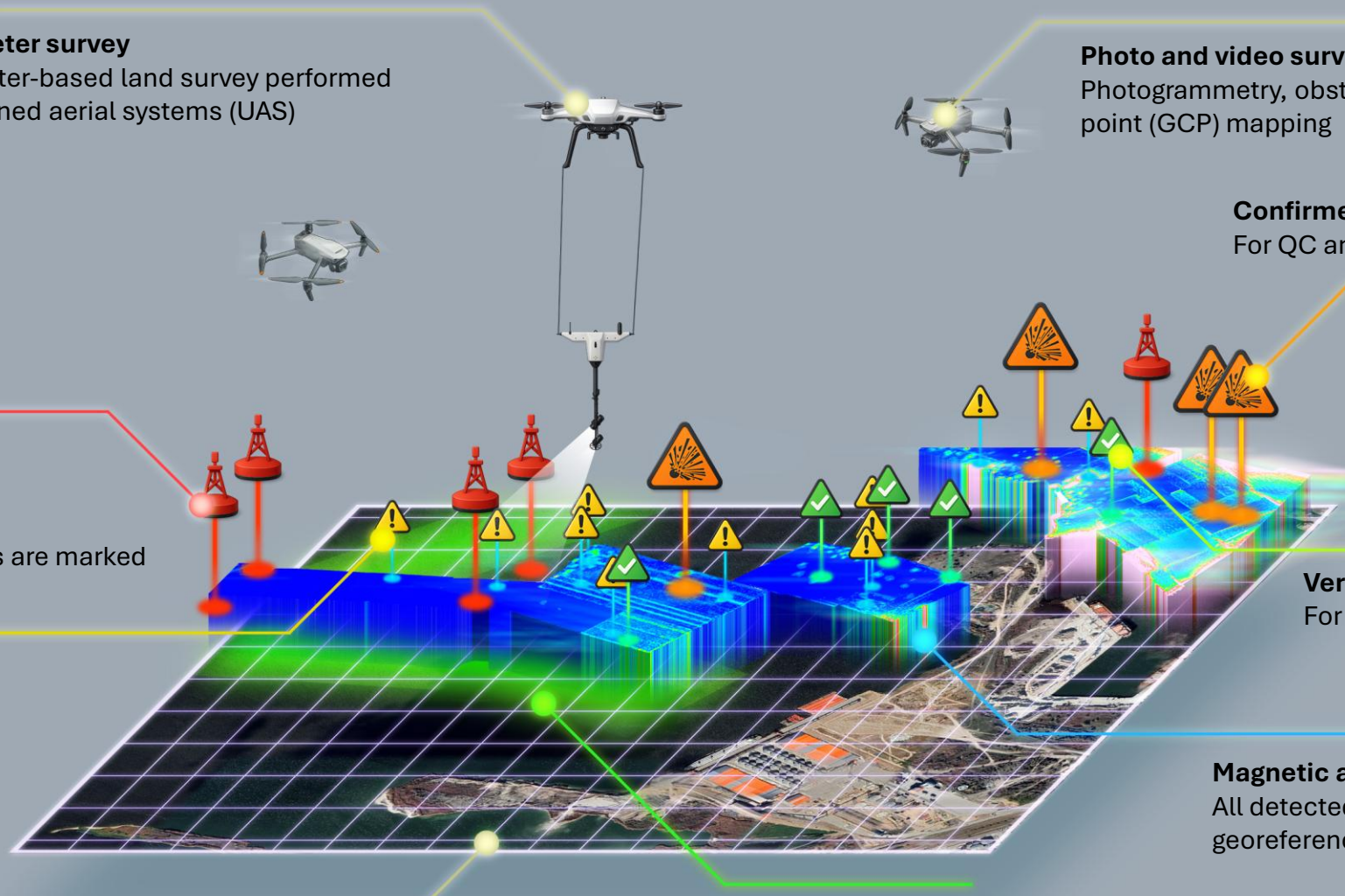
All detected threats are stored with georeferencing

## Base maps

Any existing satellite or vector maps are supported

## Route planning

UAV flight plans are defined with zones of interest and obstacles factored in



# Data unification

According to UNDP and other stakeholders, fragmented and heterogenous data in large amounts is one of the biggest current challenges during demining operations.

Our solution does not limit the amount of information stored or the types of data input sources. All collected data, both up-to-date and historical, is always consolidated in one place.



# Automated analysis and reporting



All data stored in the system is instantly available for analysis and management at any moment.

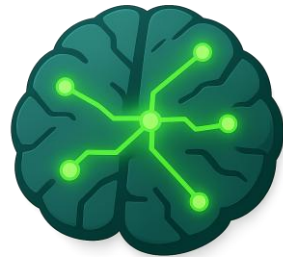
Data sync with user devices allows working with data offline.

Report documents are automatically created according to any predefined standards and templates: internal reporting, IMSMA etc.

# Roadmap



**WebODM integration**  
for automated 1-click ortho  
map generation



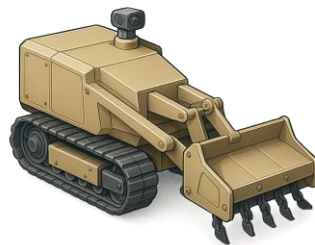
**AI-assisted threat detection**  
with automated georeferencing



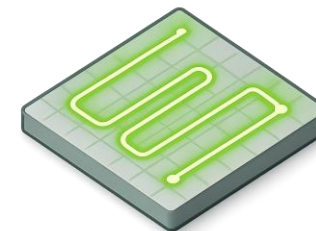
**Automated monitoring and  
backup** of server data to  
provide data integrity



**Dedicated file storage**  
For storing historical data in  
original formats



**UGV and demining machine  
integration** with automated  
mission planning and data  
collection



**Built-in route planning** for any  
type of UAV/UAS and UGV



We are facing years of hard work and serious challenges.

Our solution is aimed at dramatically increasing the safety, speed, efficiency and transparency of demining in Ukraine.





**DEMINE.PRO**

**Thank you for your attention.**

Join us to make Ukraine safe!