COLLARIS Network general introduction

Drones in civil protection and crisis management webinar, 16th May 2025

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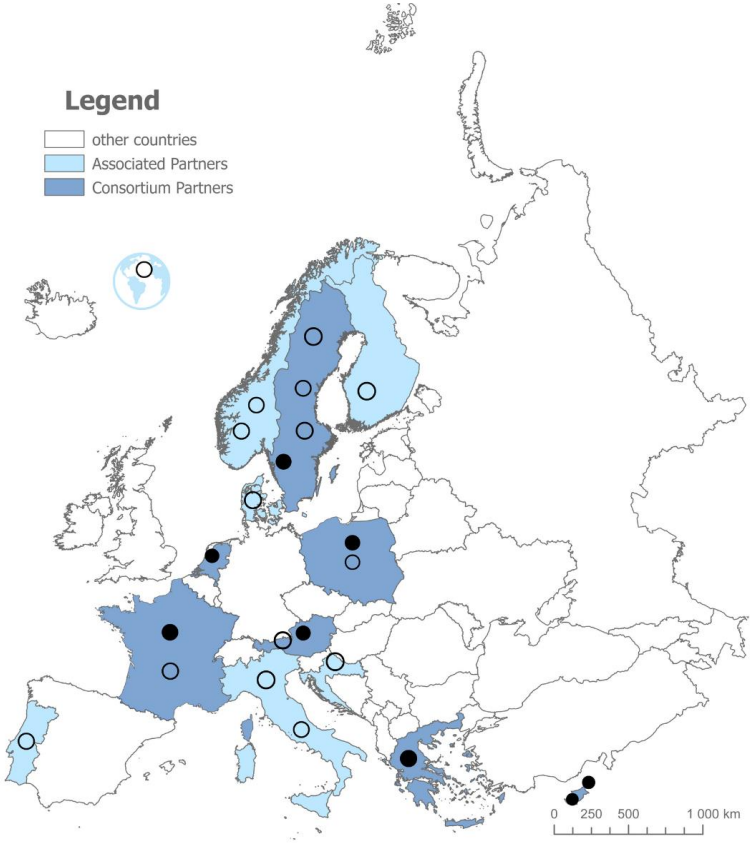
Funded by the European Union

COLLARIS in a nutshell

What is COLLARIS Network?

- The core team of the project comes from 7 different EU Member States (Poland, Sweden, France, Austria, Cyprus, plus Greece and the Netherlands).
- 15 associated partners + IEDO = direct links with 13 EU MS
- Various kinds of entities: R&D institutes, universities, rescue services and other crisis management institutions, police, air traffic control agencies, government institutions
- CERIS, DRS Responder Technology Cluster of Projects, DIREKTION project
- You are welcome to join us as well ☺



• Consortium

○ Associated Partners

General introduction

What is COLLARIS Network?

- Network of stakeholders interested in use of UAS for crisis management, first response and related applications
- A long-lasting focal point facilitating adoption and effective use of UAS among civil protection community
- A sustainable European network of scientific, engineering and end-user's expertise related to UAS in civil protection and disaster response

- Distributed knowledge centre focused on use of UAS in civil protection
- Platform for discussion about future of UAS in civil protection

COLLARIS 2023-24 Scope of work

Thematic scope – 6 main lines of activities

- operational procedures, lessons learnt and best practices using UAS
- air traffic management challenges, solutions and operational practices
- solutions for data analysis and data sharing
- auxiliary support systems (e.g. databases, simulators)
- development of methods of increasing end-users' competences
- foresighting of new developments and future use case scenarios

Key results

- Foresight study
- Field and training Trials - experimentation with advanced concepts of UAVs use for disaster response and crisis management
- Thematic workshops and Plenary meetings
- Expert reports and analyses available online:

UAS in civil protection: air traffic management challenges, Overview of doctrine, best practices and SOPs of UAS use, Overview of current practices of training: assessment and recommendations, Set of training materials for a table-top exercise, Recommendations towards standardisation / interoperability for operational practices, Overview of currently used and possible technical solutions for data analysis and data sharing, Overview of currently used auxiliary systems and available capabilities, including common practices

COLLARIS 2025-26 Scope of work

Observatory – analysis of operational practices in 6 thematic areas:

- Drones as first on Scene – University of Skovde,
- Drones for wildfires – Valabre
- Autonomous Operations – NIPV
- Drones for floods – CBK PAN
- Mapping (Pre, During, Post Disaster) – KIOS
- Coordination of UAV and manned flights in crisis operations – CBK PAN

Support for uptake of lessons learnt:

- Overview and selection of the most interesting and/or popular operational use cases for drones,
- General ATM recommendations reflecting crisis management sector needs and expectations,
- Structured overview of national drone regulations,
- Analysis of public perception of UAS in Europe in general and more in-depth for 3 European countries,
- Dedicated report on context of usage of UAS in Volunteer vs. Professional Organizations.

Trials (2 x PL, SE, CY, NL) – if possible synchronized with larger crisis management exercises, details tbd.

COLLARIS 2025-26 Scope of work

Individual capacity building and international cooperation:

- Organisation of Air Operations Coordinator Course, classroom setting,
- Publication of Massive Open Online Course as an e-learning,
- Release of Virtual Simulation Scenarios for Incident Commander training,
- Participation in UCPM exercise by providing a short episode focused on ATM aspects.

Data analysis ans sharing to improve situational awareness:

- Recommendations for interoperability standards for solutions for data analysis and data sharing to improve situational awareness and risk analysis
- Adaptation of AIDERS AI-toolkit for DRM of critical/common risks

Communication and dissemination

- Thematic webinars – use-cases and framework scenarios for drones

COLLARIS 2025 Key activities

Trial in Poland 11-12 June, Prudnik:

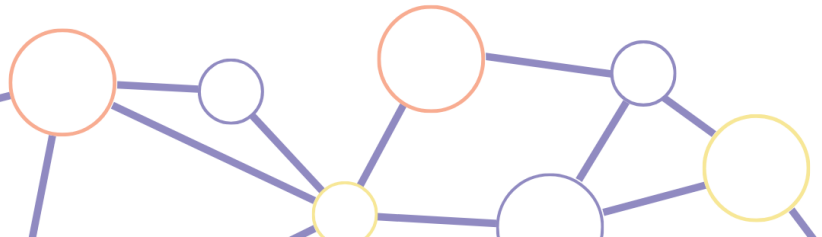
- synchronized with regional State Fire Service exercise based on wildfires in the mountains scenario
- COLLARIS Trial focused on airspace coordination (air traffic management challenges for multiple drones and manned aviation in crisis situation, role of Air Operations Coordinator and Flight Manager) and testing drone location solutions in operational conditions.
- Invitation to attend – on-site expenses and transfer from/to the airport in Kraków covered by the organizers, travel and accommodation costs (50€ per night for a single room with breakfast) to be paid by the participants

Support for uptake of lessons learnt:

- Overview and selection of the most interesting and/or popular operational use cases for drones,
- Structured overview of national drone regulations,
- Analysis of public perception of UAS in Europe in general and more indepth for 3 European countries.

FORESIGHT

Short-term horizon for drones in the emergency management sector



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When will solutions reach technical maturity?

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

Our ranges of interest:

Structure of the study

Response activities:	*Example use-case types:* **Flying eyes – gathering information**	**Flying robots – other activities**
First on scene	First reconnaissance	Delivery of aid equipment (e.g. AED, floating device)
Typical response	Situation and damage assessment, monitoring of response activities	Support (e.g. lighting) Fire suppression
Complex operations	Area monitoring	Transport of humanitarian aid
Threat monitoring	Situation monitoring	
Safety of public events	CBRNE monitoring	

General enablers

- Public acceptance
- Resilience to GNSS distortion
- Data security
- Legal environment (including dedicated methods of risk analysis in civil protection operations – SORA)

First on scene. Drones before the humans

Drones reach the emergency site before arrival of a first team of responders (long distance, traffic, difficult terrain).

Flying eyes – gathering information	Flying robots – other activities
• First reconnaissance (video transmission) • Transmission of emergency information from third-party overflying drones (drone-to-112)	• Delivery of aid equipment: defibrillator, floating device, survival pack, … • Population warning • Two-way audio communication with people in distress

First on scene. Drones before the humans

Required enablers

Air traffic management / U-space, in particular:

- Ability to conduct BVLOS flights
- Priority for “blue-light flights”
- Rapid acceptance of flight plans (<2 minutes)

First on scene. Drones before the humans

When will technologies reach maturity?

- Ability to conduct remotely-controlled, half-autonomous flights (GSM-based communication)
- Rapid planning of trajectories
- Continuous readiness and rapid take-off (around 2 minutes)
- Automatic hangars/docking stations (restoring readiness)
- Automatic payload exchange (multi-mission automatic capability)

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

First 2 hours. Drones in support of typical response activities

Flying eyes – gathering information	Flying robots – other activities
• Situation/damage assessment, monitoring of response activities: video transmission (optical and IR), geotagged images • Decision support (and evidence gathering): generation of maps and 3D models, automatic emergency delineation • Search and Rescue operations • Specialised sensors: CBRNE detection and mapping, avalanche search, cell phone detection, …	• Support operations on site (overhead area lighting, radio retransmitting) • Fire suppression • Transport of specialised equipment • *eVTOL – rapid arrival of first responding personnel / victims transportation (auxiliary for HEMS)*

First 2 hours. Drones support typical response activities

Required enablers

Air traffic management / U-space, in particular:

- Priority for “blue-light flights” (including effective priority in VLOS)
- Rapid establishment of air traffic restrictions (DRAR, restricted zone for aviation)
- Coordination of drone flights
- Coordination of drone and human-operated aviation flights (dedicated to emergency response)

Arrangements for effective use of drone data in response coordination

- Operational practices (including dedicated staff position for drone/aerial operations coordination)
- Incident commanders training (ability to request proper information)

First 2 hours. Drones support typical response activities

When will technologies reach maturity?

- Automatic image analysis (including fire, water, damage and person/object recognition) including use of AI analytics
- Effective data transmission (drone-to-ground) for real-time data analysis
- On-board data analysis
- Automatic mobile (vehicle-based) docking stations
- Fleet coordination (drone-to-drone safety), including autonomous flights (based on control system data exchange and/or on-board aerial situational awareness)
- Including standard for data exchange between different brands
- Monitoring of all drone traffic/all aerial traffic (“blue-force tracking” and “red-force tracking”)

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

Complex operations. Long-term and large-scale operations

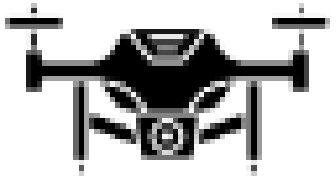
Use cases, enablers and technologies in addition to the “First 2 hours” block

Flying eyes – gathering information	Flying robots – other activities
• Monitoring of area of operations: change detection, specific analysis (e.g. monitoring of evacuated area)	• Transport: logistic of rescue activities • Transport: humanitarian aid • *eVTOL – evacuation of population from affected area*

Complex operations. Long-term and large-scale operations

Required enablers

- Implementation of IT systems for data access and data sharing among civil protection users



Complex operations. Long-term and large-scale operations

When will technologies reach maturity?

- Automatic change detection (analysis of images gathered repetitively during long operation), including use of AI analytics
- Tethered drones – high endurance for long-duration operations (e.g. 5 days of 16 hours continuing operations)

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

Threat monitoring

Use cases, enablers and technologies in addition to some elements from the “First on scene” block.

Flying eyes – gathering information	Flying robots – other activities
• Monitoring during high-risk periods (flooded dykes, very dry forests) • Regular infrastructure monitoring	

Threat monitoring

Required enablers?

Threat monitoring

When will technologies reach maturity?

- Automatic change detection (analysis of data gathered repetitively during long operation) based on different sensors (optical, IR, lidar, hyperspectral), including use of AI analytics

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

Safety of public events

Use cases, enablers and technologies in addition to some elements from the “First 2 hours” block

Flying eyes – gathering information	Flying robots – other activities
• Situation visual monitoring • CBRNE monitoring	• Safe interception of rogue drones

Safety of public events

Required enablers?

Safety of public events

When will technologies reach maturity?

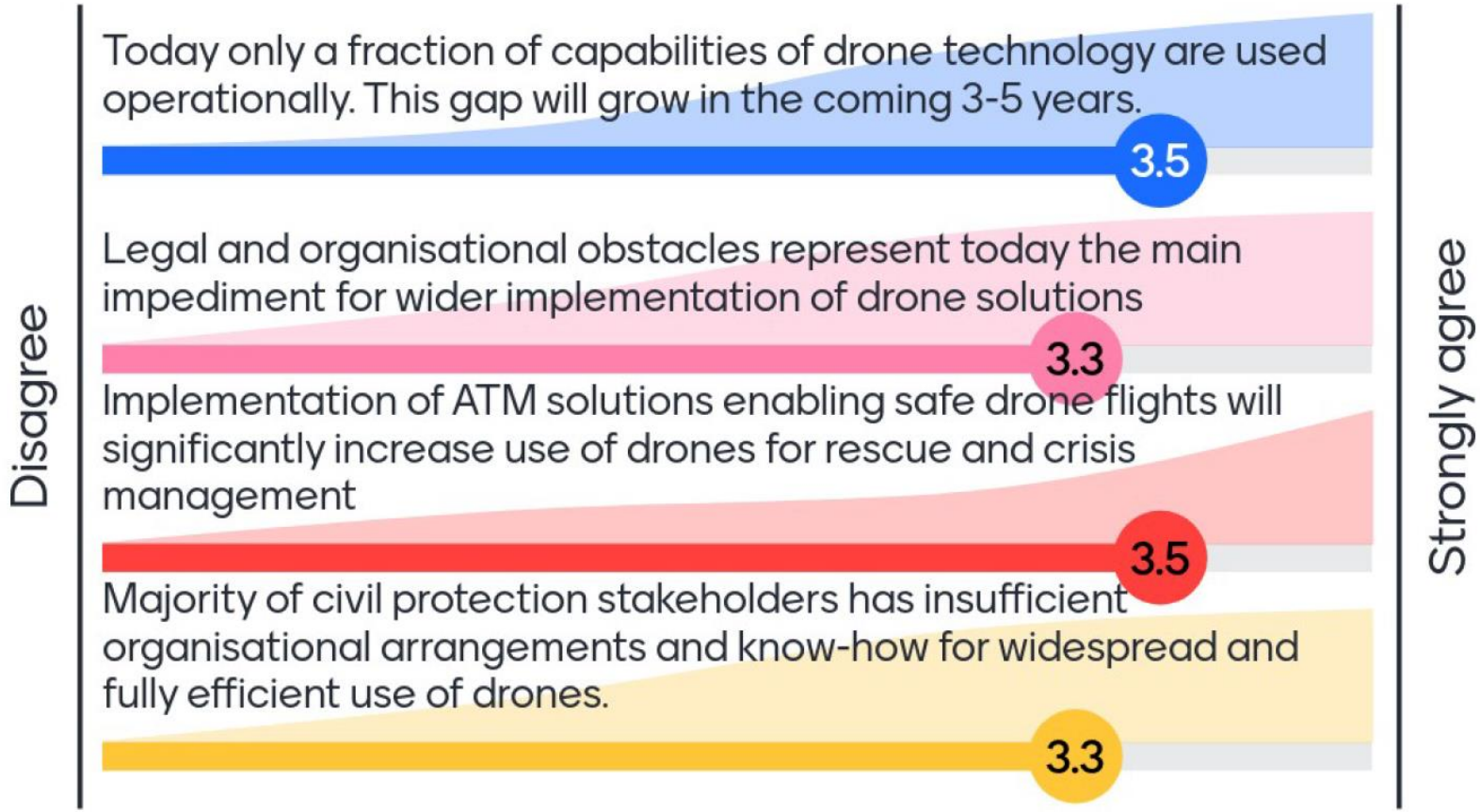
- High safety of drone flights – ability to fly over people

A mature system should have a technical reliability above 80% (if operational conditions are met, the mission should be successfully completed at least 8 times per 10 missions).

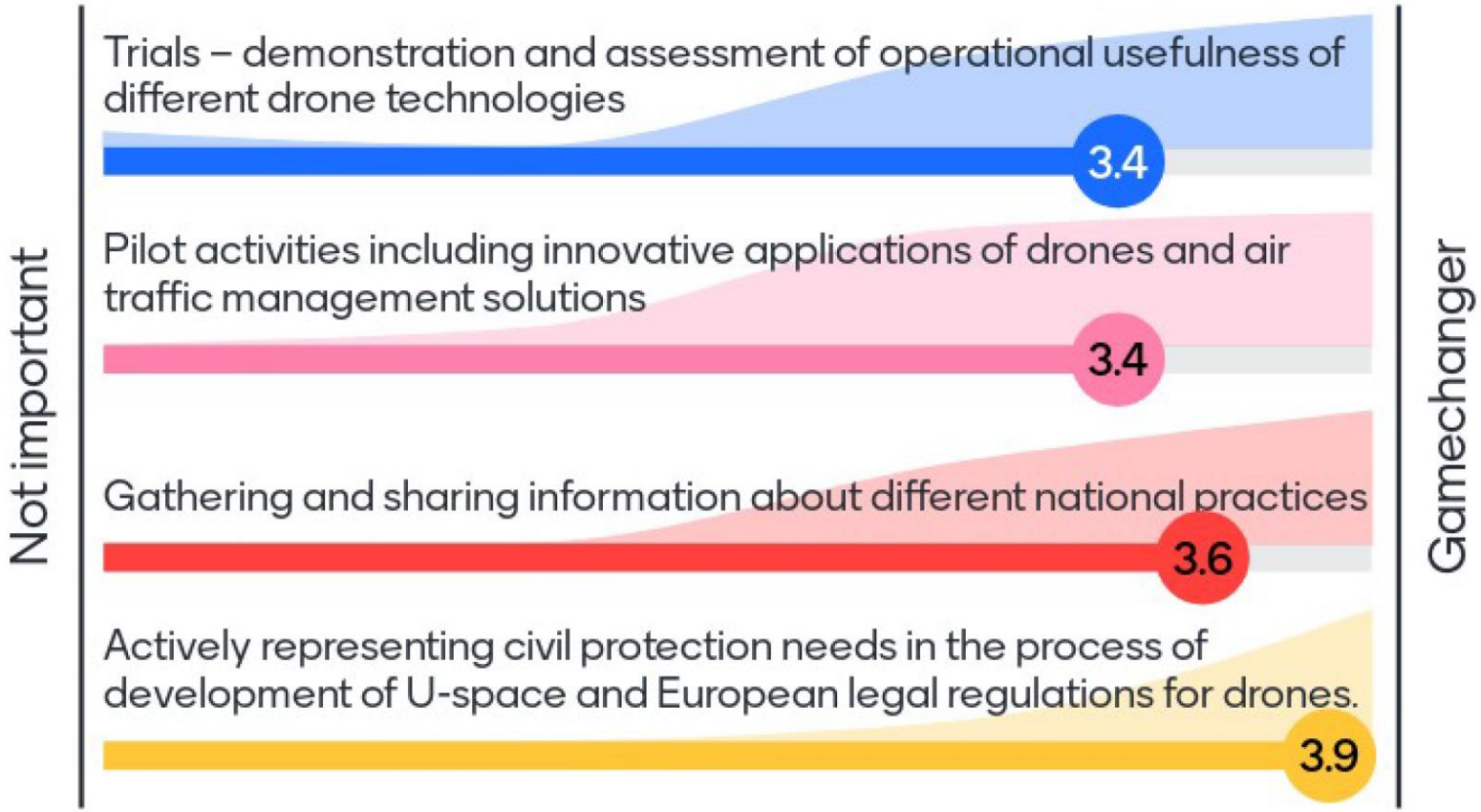
While there is a high number of drone solutions that has already achieved technical maturity, today only a relatively small fraction of available capabilities is used operationally for rescue and crisis management.

Effective use of drones is limited mainly by legal and organisational obstacles and not by pace of technology development.

General challenges



Support activities that may improve the situation



Implementation of air traffic management solutions enabling safe drone flights will be the most significant factor increasing use of drones for rescue and crisis management.

There is a universally recognised need for more effective communicating of civil protection needs to SESAR Joint Undertaking and EASA – institutions responsible for definition of current and future air traffic management.

Majority of civil protection stakeholders has insufficient organisational arrangements and know-how for widespread and fully efficient use of drones in their activities.

Cooperation between institutions in exchanging experiences and sharing relevant know-how may be supported by **establishment of the "Observatory of best practices of use of drones"**.

There is a high need to establish an ecosystem supporting introduction of innovative uses of drones, in particular through pilot activities, bringing together the scientific community and crisis management practitioners.

Drone use-cases

- Use of drones during the 2024 flood in Poland
- Mountain Rescue in Poland – TOPR
- AED drone - delivery in Sweden

Funded by the European Union

Drone use-cases

- **Use of drones during the 2024 flood in Poland**
- **Mountain Rescue in Poland – TOPR**
- **AED drone - delivery in Sweden**

Use of drones during the 2024 flood in Poland

During the flood that hit southern Poland in September 2024, **drones played a critical role in supporting crisis response and civil protection activities.** Their deployment **provided real-time situational awareness, aided in decision-making, and significantly accelerated damage assessment and coordination efforts.**

From September 13th, drones were used by the State and Volunteer Fire Services, the Police, Polish Armed Forces and specialized spontaneous volounteering teams like those deployed by Flytronic S.A.

Drones such as the DJI Matrice 200, DJI Mini 3 Pro, and FlyEye were deployed for **real-time video streaming, photogrammetry, and tactical assessments**. Their footage enabled a quick understanding of evolving flood dynamics.

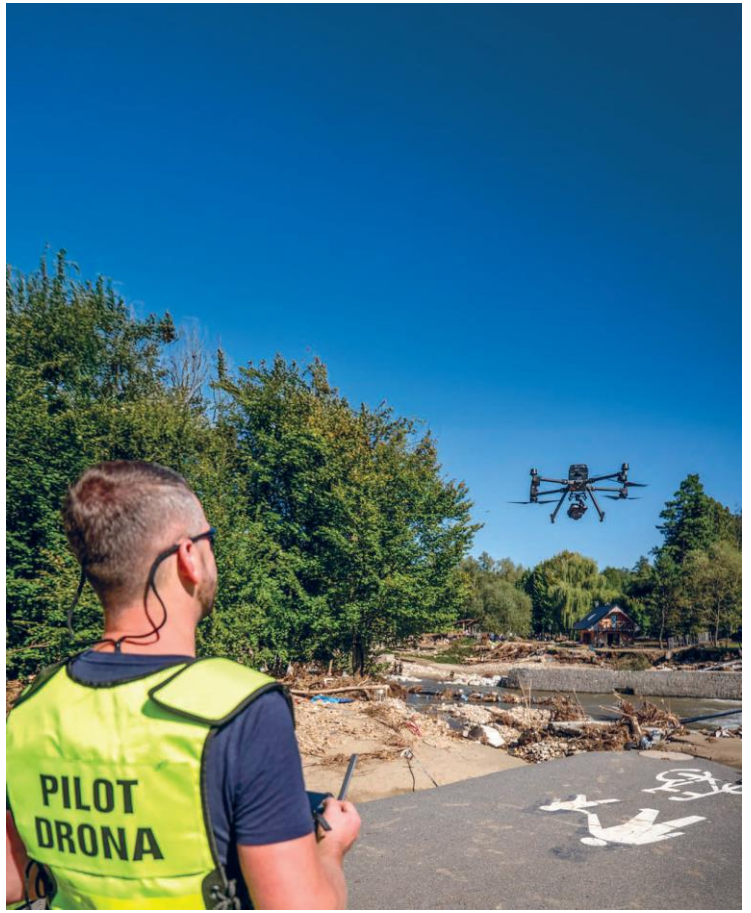


Photo D. Frymark

Rapid aerial reconnaissance

Firefighters and drone pilots from the State Fire Service (PSP), supported by local and volunteer units, used various types of drones to perform aerial observations, photo and video documentation, and mapping.

These activities helped:

- Monitor the condition of the levees and estimate required repair efforts,
- Assess the damage to infrastructure (e.g., destroyed bridges and roads),
- Inspect river overflow and sediment deposition,
- Determine road passability for rescue vehicles,
- Manage traffic in affected cities,
- Guide aid delivery and clean-up operations,
- Perform accurate nighttime sandbag drops from a helicopter by illuminating the area with drones (to reinforce the levees),
- Back the near-real-time rumors debunking actions.

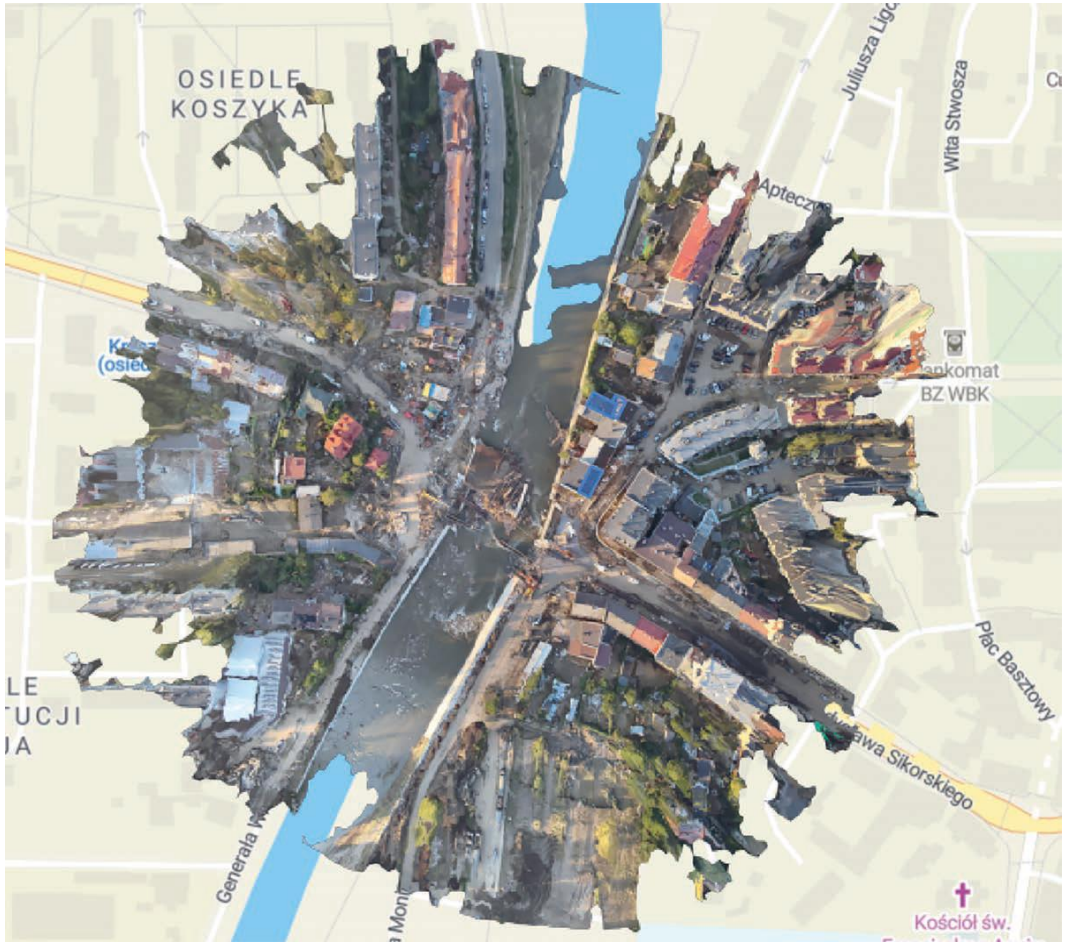
Stronie Śląskie. Broken dam on the flood control reservoir on the Morávka River burst. Photo S. Ostrowski

Mapping and 3D modelling

Using **open-source tools like OpenDroneMap and 3D modelling software**, drone teams generated detailed maps and models of affected areas. This included:

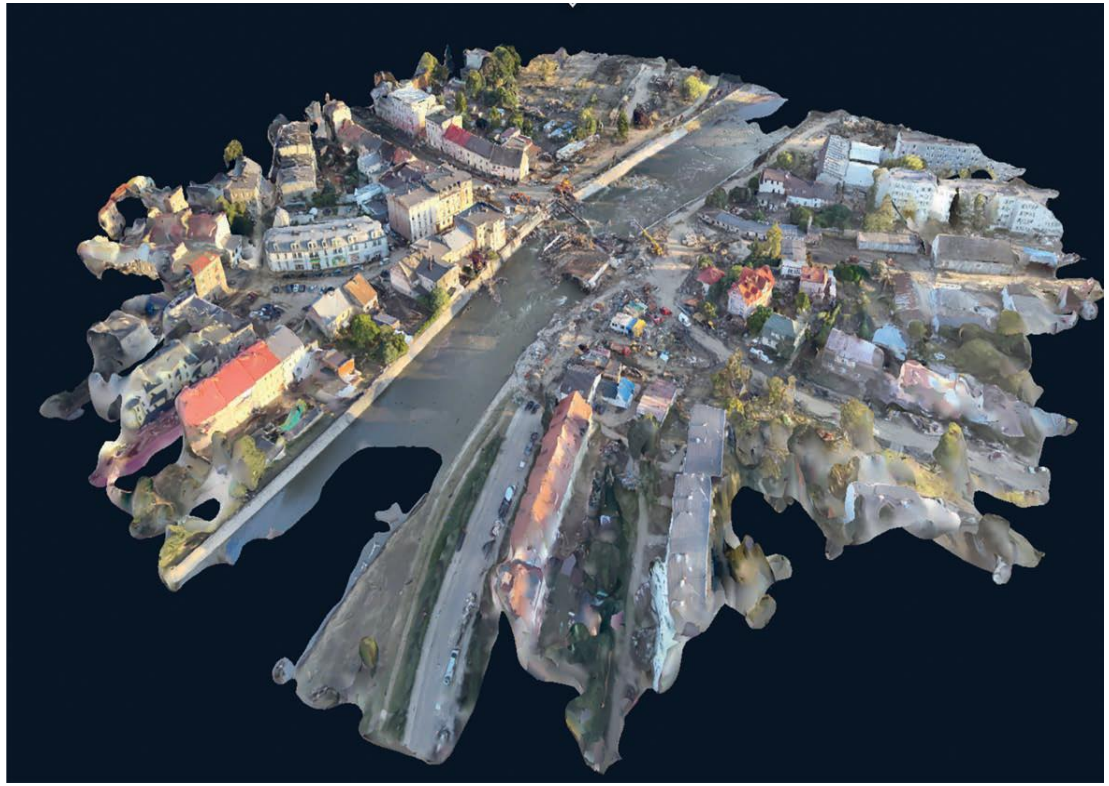
- Mapping the changed riverbed of the Biała Głuchołaska River for river course restoration,
- Generating 3D models for documenting the destroyed bridge structures,
- Providing materials for the governmental informational campaign,

These outputs were used by decision-makers to **plan recovery operations and evaluate infrastructure stability.**



Głuchołazy after the passage of the flood wave. First 2D imaging for SD/SK

Mapping and 3D modelling



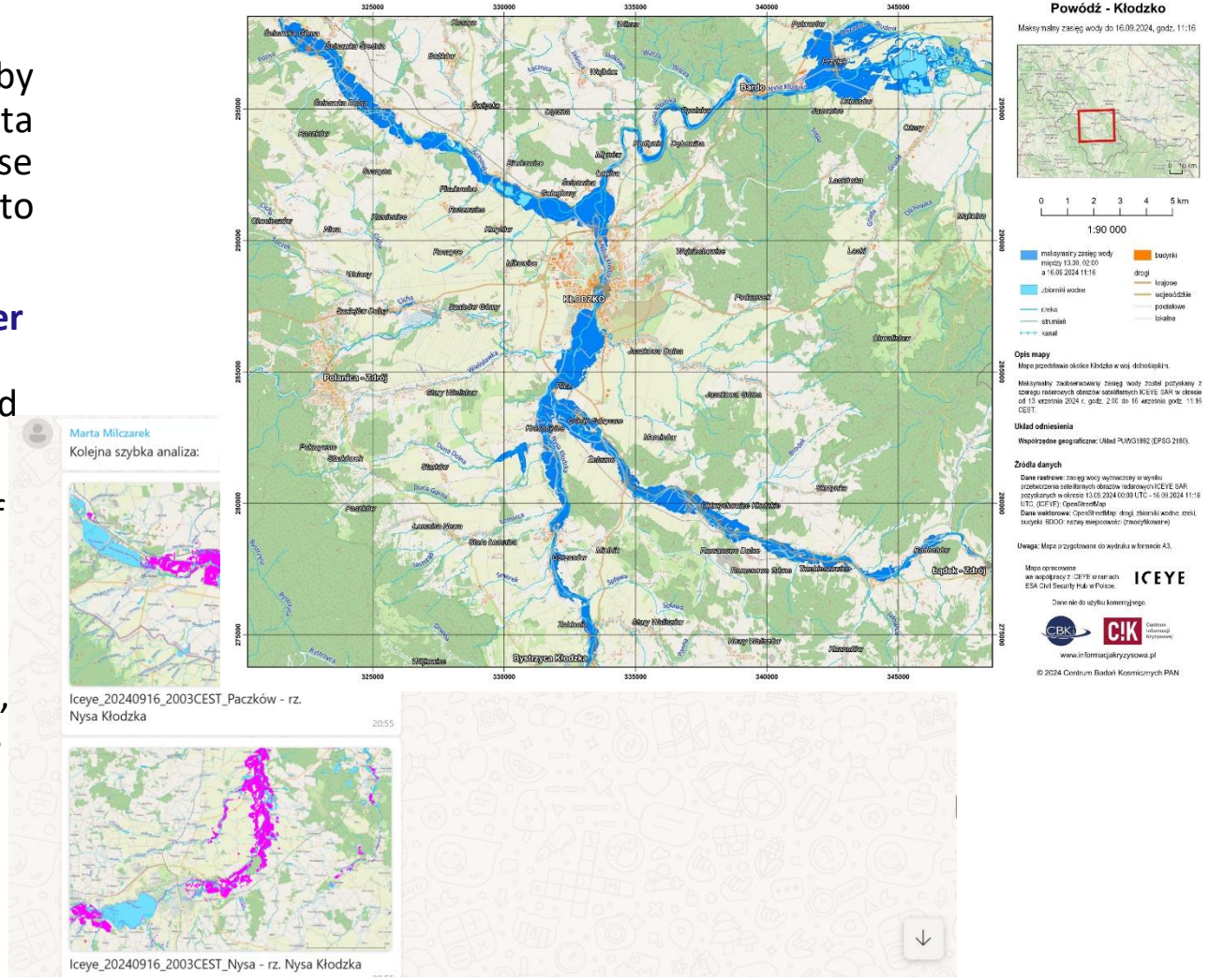
A measurable 3D model of urbanised infrastructure.Used for initial assessment of road passability for delivery of aid and planning of subsequent rescue and reconstruction activities.

Water sill on the Głuchołaska Biała River. Measurable3D model created after the passage of a destructiveflood wave. Made viadrone due to the very difficult access to the site by land.At the same time, the model allows a numerical and quantitativeassessment of the restoration of access roads to the site.In addition, it provides information on the amount of dry materialneeded to restore the river toits natural channel.

Satellite Data – The Civil Security Hub

Drones operated alongside satellite data analysis conducted by CIK CBK PAN. The integration of drone imagery and satellite data (from ICEYE, Planet Labs, and Pléiades Neo) enabled precise monitoring of flood extents, riverbed shifts, and damage to populated areas.

- The Civil Security Hub in Poland activated on **Friday, September 13 at 11:00**. Initiation of satellite monitoring on Friday, 1404 (CEST). First analysis released and delivered to users in the field HQ on **Saturday at 23:03,**
- **147 quick-view maps** delivered to users, reaching efficiency of app**. 50 min. after satellite pass**
- **9 releases of maximum water extent analysis**
- Information delivered to State Fire Service (Main HQ, field HQ, commanders in the field, fire service geoportal), regional crisis management centres, hydrological service (IMGW), water authorities, military Opertional Command



Airspace Management

Airspace management became crucial due to the presence of multiple types of aircraft, including helicopters and high-altitude drones. The PSP used restricted air zones (R zones) via the DSS.

In total, **32 restricted (R) zones were established** to safely coordinate manned and unmanned aircraft over flood-affected cities.

The biggest **problem** was the contact with General Aviation (GA) pilots who were invisible to the Flight Information Service (FIS) and military pilots with total disregard for civil regulations.

"I personally managed 24 R zones. Every day I received 600 – 700 calls asking for permission to fly there."

Cpt. Marcin Klecz, State Fire Service

Technical capabilities

Drones were flown at altitudes ranging from 120 to 5,000 metres depending on the model and mission:

- The Bayraktar TB2 drone, operated by the 12th Unmanned Aircraft Base in Mirosławiec, provided strategic imaging especially at night—when satellites couldn't collect optical data.
- Smaller drones like DJI Mini 3 Pro and Mavic 3T enabled agile, hand-launched observation even in tight urban areas.
- A drone operations trailer prepared by the Chojnice Volunteer Fire Service. This basic mobile command station featured a power supply, workspace, and large monitors for pre- and post-disaster image comparison, facilitating effective coordination in the field

Thanks to favourable weather, small drones outperformed more specialised platforms like DJI M200 or M300 - according to pilots reports: due to shorter flight preparation time.

Identified needs

- Better procedural coordination of military flights;
- Lack of means for active detection of aircraft (radars, ADS-B receivers, etc.);
- Potential opportunity to use drones capable of carrying cargo.

Mountain Rescue in Poland – TOPR

In recent years, the **Tatra Volunteer Search and Rescue (TOPR)** has significantly expanded the use of drones in their search and rescue operations.

Two types of drones tested during Summer 2024 and already used operationally:

- **DJI Matrice 300 RTK**: H20T camera with thermal imaging, a laser rangefinder, and the ability to mark geographic coordinates and altitude.
- **DJI FlyCart 30:** Specialises in transporting heavier loads, equipped with a 20-meter winch with weight measurement and emergency release features, obstacle avoidance systems, and a parachute for safety. This drone can carry loads of up to 20 kg over distances of up to 3 km, overcoming elevation gains of more than 1000 meters.

During tests in June 2024, the DJI FlyCart 30 transported a 16 kg rescue stretcher from Morskie Oko to Rysy in just 8 minutes, covering a distance of 2800 meters and over 1000 meters of elevation gain.
Credits: https://enterprise.dji-ars.pl/DJI-FlyCart-30-i-TOPR-transport-na-najwyzszy-szczyt-Polski-blog-pol-1740383708.html

Search and Rescue Operation on Rysy - October 2024

A female tourist became stranded in exposed terrain under very difficult weather conditions.

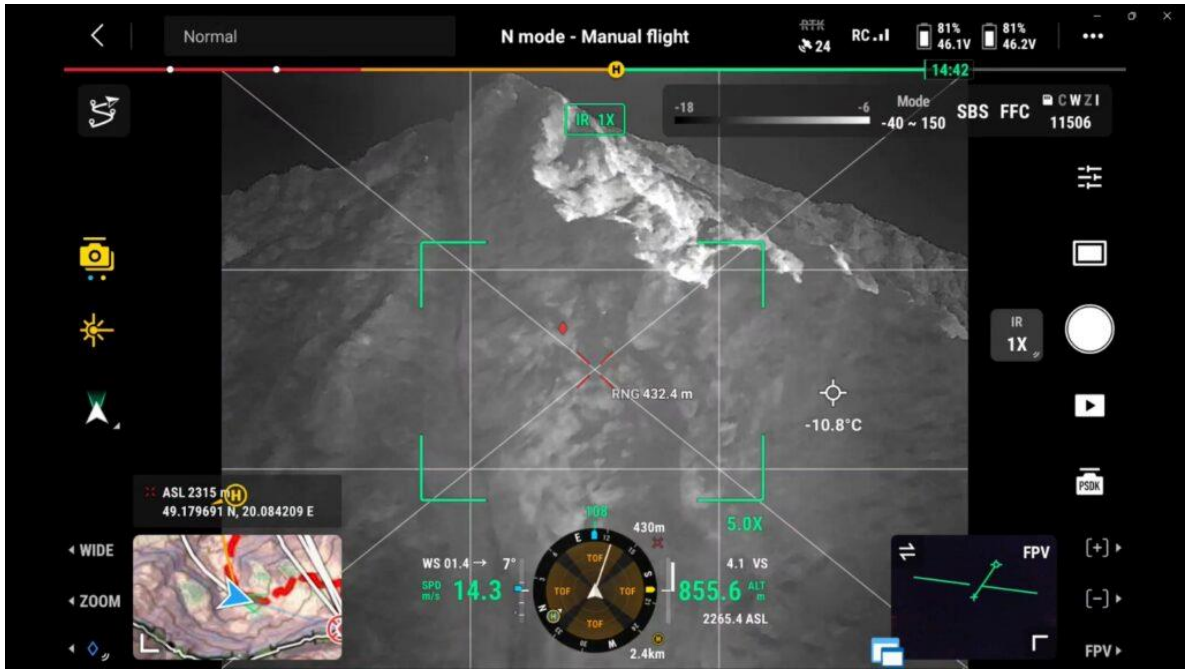
Due to approaching darkness and strong winds, the rescuers were unable to use a helicopter. The individual was frostbitten, dehydrated, hypothermic, and time was working against her.

Three rescuers set out from base to reach and secure the individual and guide her down. Simultaneously, the TOPR drone team was deployed to locate the person and deliver thermal gear and a radio for communication.

Drone assisted actions

Locating the injured person

The person was found on the Rysy face, about 40 meters below the ridge connecting Rysy with Żabi Koń, at an altitude of 2330 meters above sea level.



Location of the victim identified by drone. DJI Matrice 300 RTK with H20T camera (thermal + optical imaging). Photo credits: https://enterprise.dji-ars.pl/Wsparcie-akcji-ratowniczych-w-Tatrach-dzieki-dronom-serii-Enterprise-i-Delivery-blog-pol-1740383077.html?fbclid=IwY2xjawKRS-JleHRuA2FlbQIxMAABHl03u-qFKpBZQ6ATPXs86FylOaPpwjyPye9C9tYWsq6VCOrHGzqiYj2taGgZ_aem_wg0kii96KIH_AlAFB5aAXQ

Drone assisted actions

Delivery of the first rescue package

- Delivery of a thermal jacket, a heat pack and a radio
- Cargo 2,5 kg

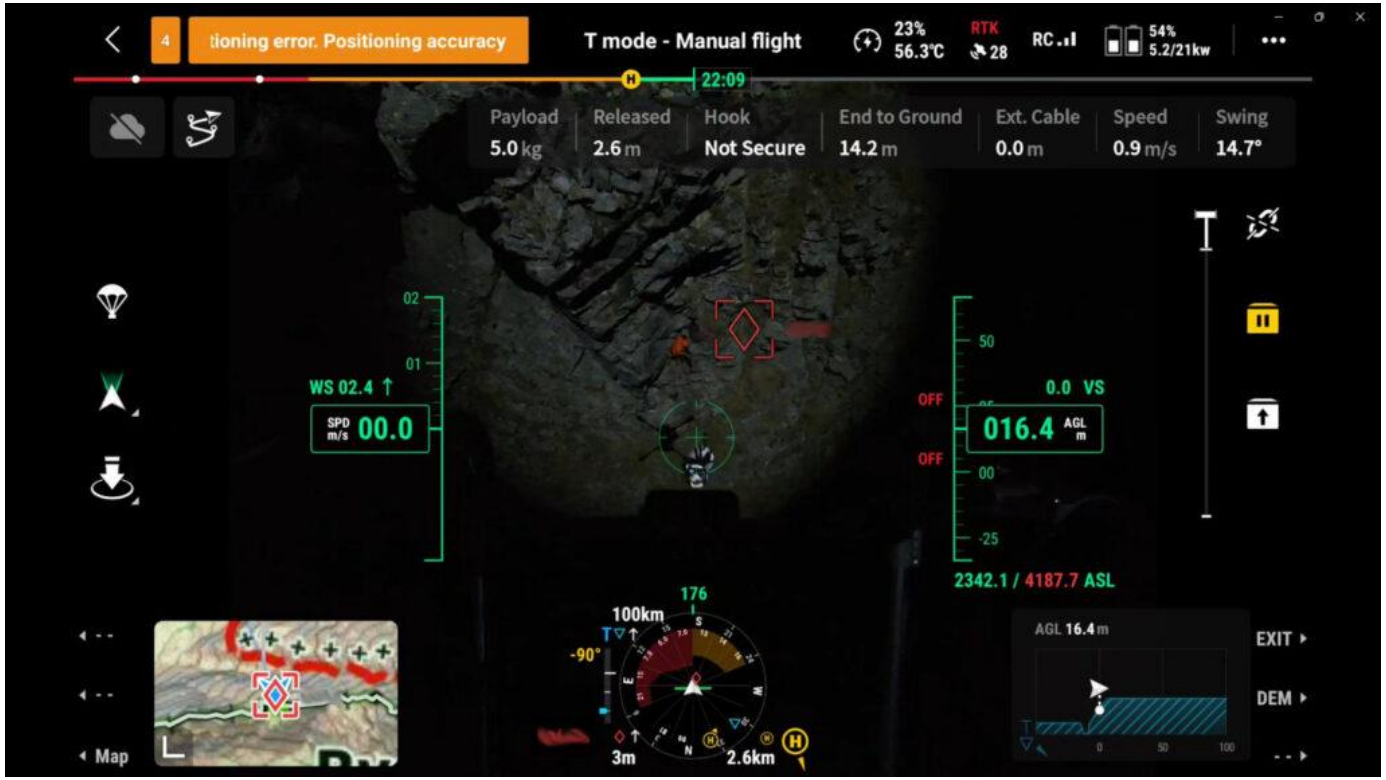
The DJI Matrice 300 RTK during tests.
Credits: https://enterprise.dji-ars.pl/TOPR-wdraza-drony-DJI-do-akcji-poszukiwawczo-ratowniczych-blog-pol-1740136182.html

Delivery of the firt rescue package by the DJI Matrice 300 RTK.
Credits: https://enterprise.dji-ars.pl/Wsparcie-akcji-ratowniczych-w-Tatrach-dzieki-dronom-serii-Enterprise-i-Delivery-blog-pol-1740383077.html?fbclid=IwY2xjawKRS-JleHRuA2FlbQIxMAABHl03u-qFKpBZQ6ATPXs86FylOaPpwjyPye9C9tYWsq6VCOrHGzqiYj2taGgZ_aem_wg0kii96KIH_AlAFB5aAXQ

Drone assisted actions

Delivery of heavier support – thermal gear and food

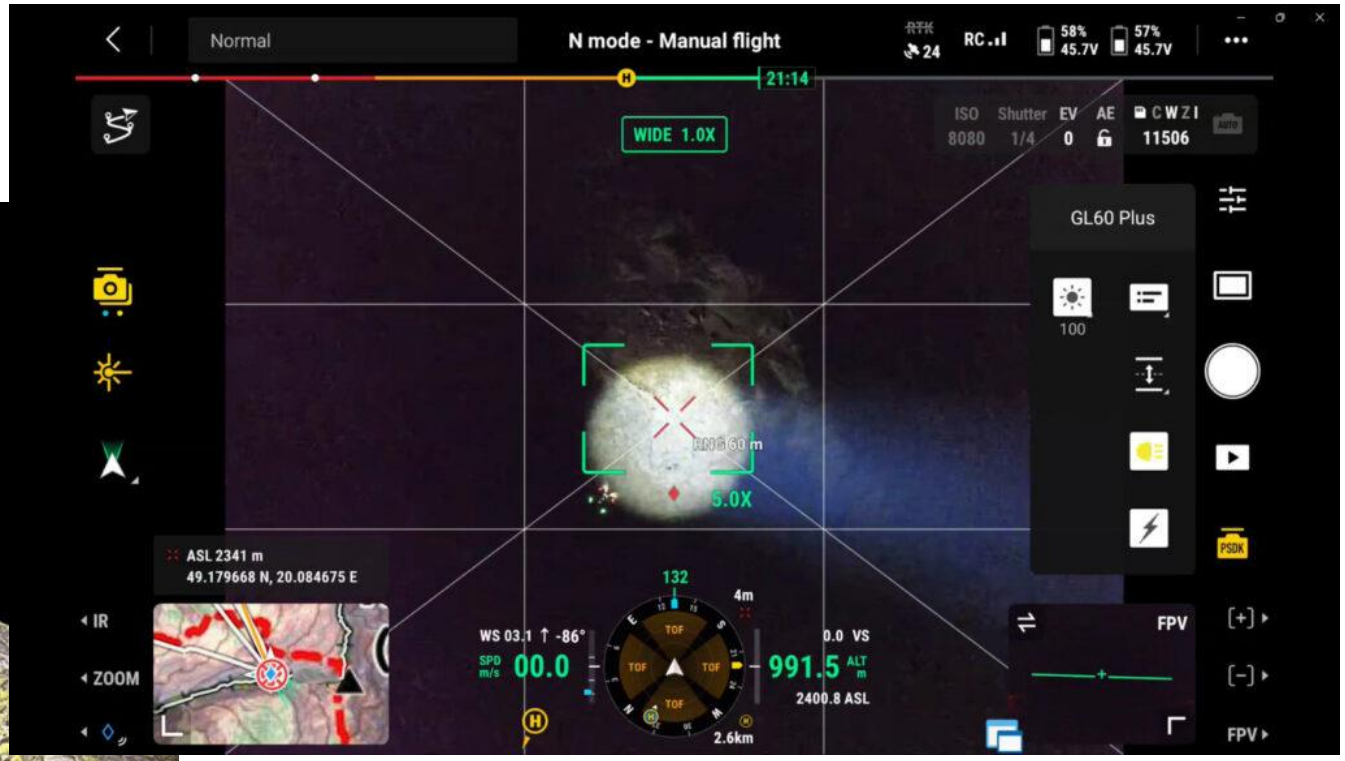
- Delivery a thermos with hot tea, an additional jacket, power bank, energy snacks
- Cargo 5 kg



DJI FlyCart 30. Delivery of additional equipement.
Credits: https://enterprise.dji-ars.pl/Wsparcie-akcji-ratowniczych-w-Tatrach-dzieki-dronom-serii-Enterprise-i-Delivery-blog-pol-1740383077.html?fbclid=IwY2xjawKRS-JleHRuA2FlbQIxMAABHl03u-qFKpBZQ6ATPXs86FylOaPpwjyPye9C9tYWsq6VCOrHGzqiYj2taGgZ_aem_wg0kii96KIH_AlAFB5aAXQ

Drone assisted actions

Rescuer support and area illumination

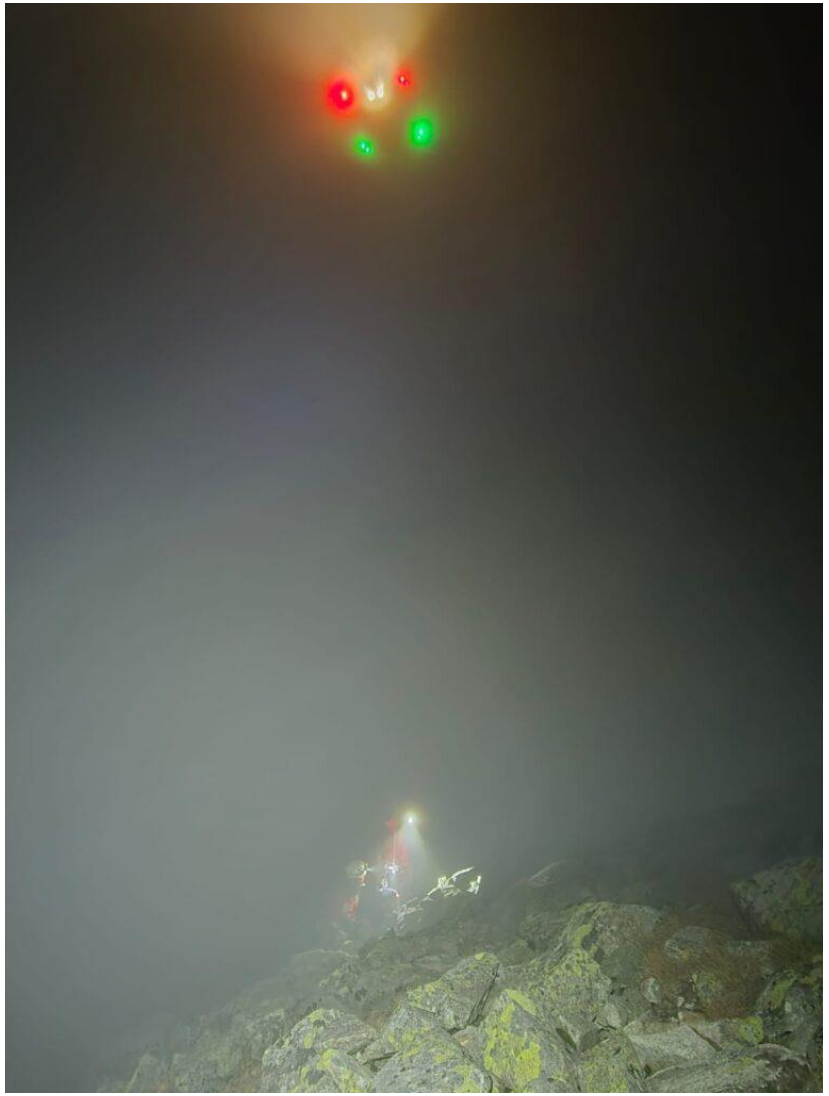


Matrice 300 RTK equipped with GL60 ZOOM lighting.
Credits: https://enterprise.dji-ars.pl/Wsparcie-akcji-ratowniczych-w-Tatrach-dzieki-dronom-serii-Enterprise-i-Delivery-blog-pol-1740383077.html?fbclid=IwY2xjawKRS-JleHRuA2FlbQIxMAABHl03u-qFKpBZQ6ATPXs86FylOaPpwjyPye9C9tYWsq6VCOrHGzqiYj2taGgZ_aem_wg0kii96KIH_AlAFB5aAXQ

Drone assisted actions

Transport of equipment downhill

- Transported the injured person's backpack (19 kg) and unnecessary gear downhill
- Cargo 19 kg



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Key findings from the operation

- Effectiveness in difficult conditions
- Short response time
- Rescuer relief
- Safety
- Resource efficiency

DJI Matrice 300RTK flying over Morskie Oko. Photo credits: https://enterprise.dji-ars.pl/TOPR-wdraza-drony-DJI-do-akcji-poszukiwawczo-ratowniczych-blog-pol-1740136182.html

AED drone - delivery in Sweden

As of early 2025, the drone AED service operates in six locations across Västra Götaland, covering over 250,000 residents.

- Over 10,000 out-of-hospital cardiac arrests annually in Sweden
- Many cases where emergency help arrives too late
- Program launched to dispatch drones with AEDs alongside ambulances

Credit: Everdrone

AED drone - delivery in Sweden

A published study analyzing 72 dispatches between April 2021 and May 2022 showed promising results:

- 72 dispatches analyzed (Apr 2021 - May 2022)
- 58 successful AED deliveries (81%)
- Drone arrived before ambulance in 37 cases (67%), over 3 minutes earlier on average
- AED used 6 times by bystanders in confirmed cardiac arrests

Success story:

- December 2021, Trollhättan: 71-year-old man had cardiac arrest while shoveling snow
- Drone delivered AED in just over 3 minutes
- Bystander (a doctor) used it; man survived and fully recovered

AED drone - delivery in Sweden

How does it work?

- Emergency call to 112 triggers both ambulance and drone dispatch
- Drone uses GPS to autonomously fly to the scene
- AED is lowered with a winch system for bystanders to use
- Operates within Swedish Transport Agency regulations

AED drone - delivery in Sweden

Potential enhancements of the Swedish solution:

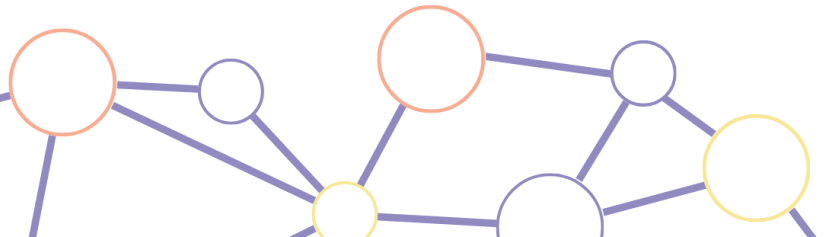
- **Geographical expansion:** Plans are underway to extend the service to more regions within Sweden and potentially to other European countries.
- **Technological enhancements:** Efforts are being made to improve drone capabilities, including operations in adverse weather conditions and integration with emergency dispatch systems for optimized routing.
- **Broader Emergency applications:** The drone delivery model is being considered for transporting other critical medical supplies, such as EpiPens, to address various emergency scenarios.

Use-cases – interview questions

1. **What is it, where and how is it used?**
   - General description of the use-case
   - Who uses it, on what scale, where?
   - How does it work?
   - ….
2. **Statistics of use and effectiveness of the solution**
   - How many times has it been used operationally?
   - What was the success rate?
   - What KPIs?
   - ….
3. **Technical and organisational aspects**
   - What are the key technological components of the solution?
   - What safety measures are in place to ensure that drones can fly safely in shared airspace with manned manned aviation or other drones?
   - …
4. **Benefits and key challenges**
   - What are the main advantages and benefits of this solution?
   - What are the main technical or organisational challenges associated with deploying drones for this use-case?
   - …
5. **Future potential of the solution**
   - What is the future potential of this solution over the next 1-3 years?
   - What new potential drone applications or use-cases could emerge with the improvement of drone technology and evolvement of regulatory frameworks?
   - What are the barriers for future expansion?

Collaris2

UCP Knowledge Network platform



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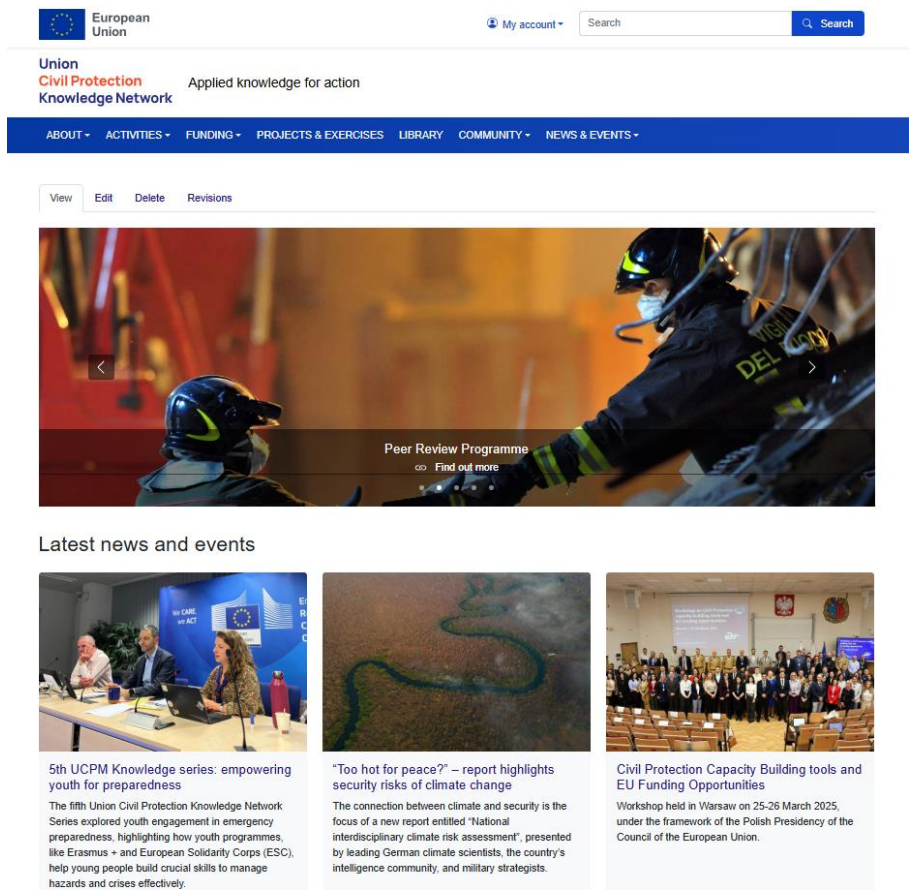
UCP Knowledge Network (UCPKN)

- https://civil-protection-knowledge-network.europa.eu/
- Founded in 2021, 1600+ community members from all over Europe
- Connect first responders, disaster risk managers, scientists, and decision-makers
- Make knowledge on civil protection and disaster risk management accessible to all



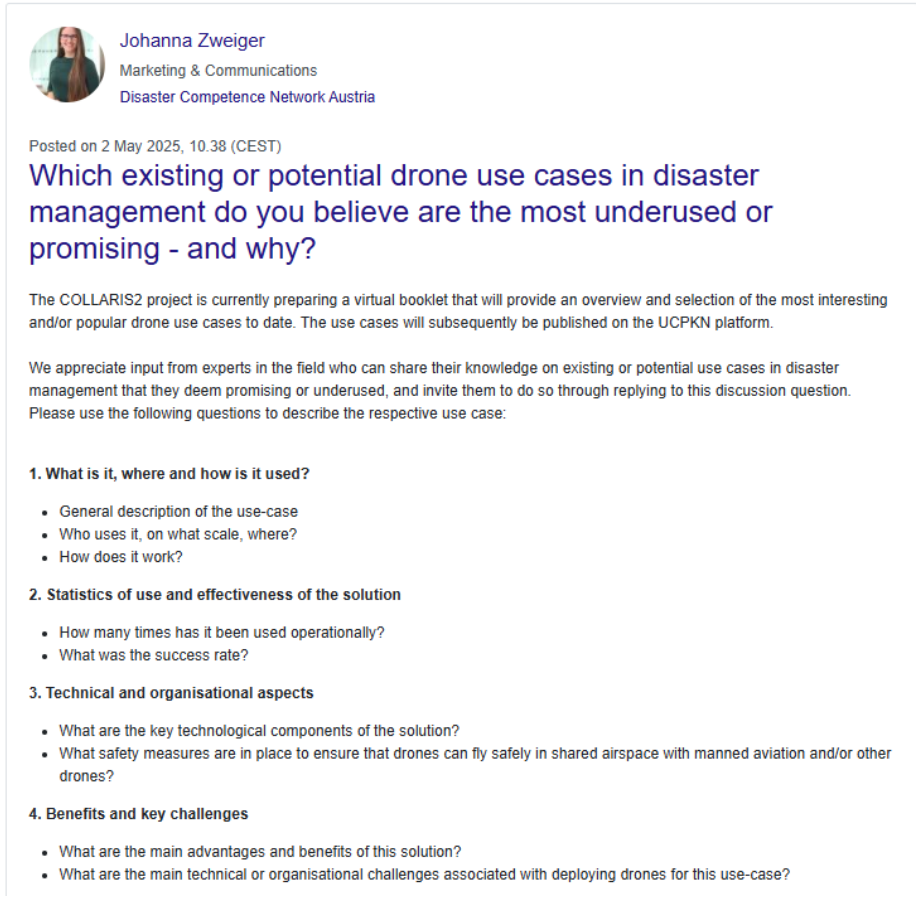
Benefits of joining the UCPKN platform

- Extensive information about EU-funded **projects** in the field of disaster prevention and preparedness (mainly DG ECHO), e.g., deliverables
- Publish and access content in the **Knowledge Library**:
  - Topical areas: floods, wildfires, CBRNE, maritime issues, climate change, resilience
  - Research papers, reports, legal documentation, case studies, good practices and lessons learnt, policies and plans, training materials
- **News** (stories and quarterly newsletter) and **events calendar**
- **Discussion groups:** exchange knowledge on common topics of interest

COLLARIS2 discussion group

- ‘Challenges and Opportunities of Drone Use in Disaster Management’
- Current question on promising/underused drone use cases
- Results will be published on the platform

Please join the discussion group and share your knowledge!



Johanna Zweiger
Marketing & Communications
Disaster Competence Network Austria

Posted on 2 May 2025, 10.38 (CEST)

Which existing or potential drone use cases in disaster management do you believe are the most underused or promising - and why?

The COLLARIS2 project is currently preparing a virtual booklet that will provide an overview and selection of the most interesting and/or popular drone use cases to date. The use cases will subsequently be published on the UCPKN platform.

We appreciate input from experts in the field who can share their knowledge on existing or potential use cases in disaster management that they deem promising or underused, and invite them to do so through replying to this discussion question. Please use the following questions to describe the respective use case:

1. What is it, where and how is it used?

- General description of the use-case
- Who uses it, on what scale, where?
- How does it work?

2. Statistics of use and effectiveness of the solution

- How many times has it been used operationally?
- What was the success rate?

3. Technical and organisational aspects

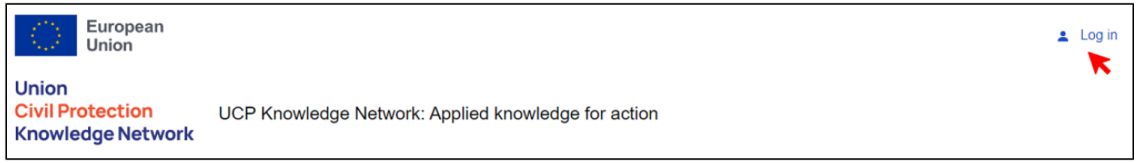
- What are the key technological components of the solution?
- What safety measures are in place to ensure that drones can fly safely in shared airspace with manned aviation and/or other drones?

4. Benefits and key challenges

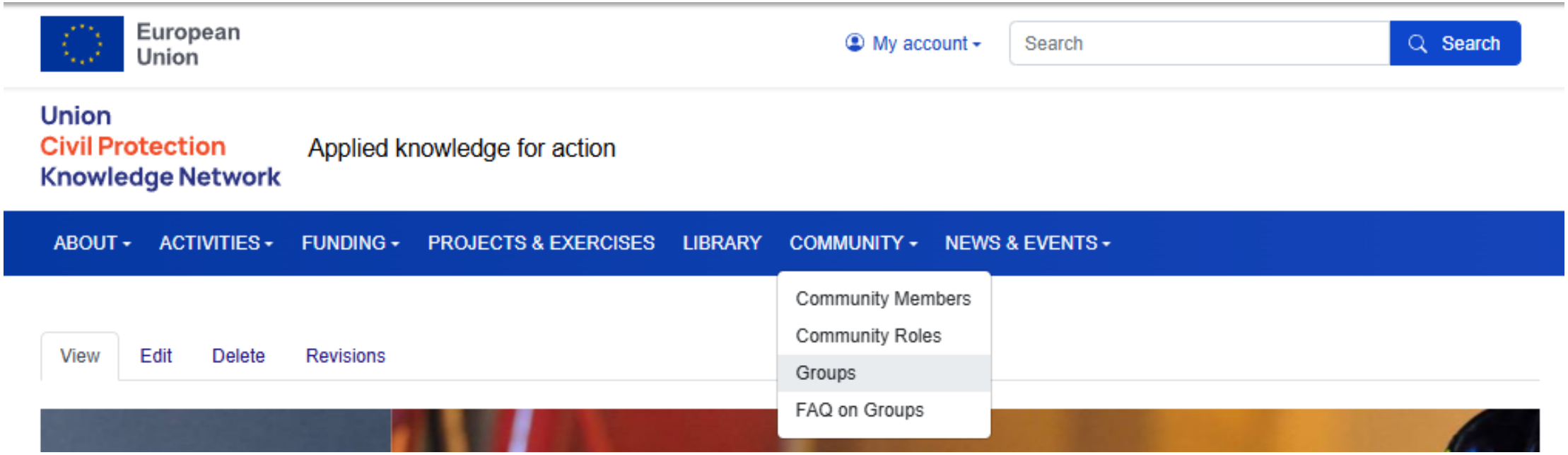
- What are the main advantages and benefits of this solution?
- What are the main technical or organisational challenges associated with deploying drones for this use-case?

How to join the UCPKN

- Create an **EU Login ID** (the same ID is used on other EU managed platforms) through the EU Login homepage https://ecas.ec.europa.eu/cas/login (using a work-related email is recommended)
- Add a **second factor** to your account, e.g., through the EU Login Mobile App
  - download the app to your phone
  - on your computer, go to the EU Login homepage > 'My Account' > 'Manage my mobile devices' > add your phone > scan the QR on your computer screen using your phone to initialize your device
- Visit https://civil-protection-knowledge-network.europa.eu/ and click on 'Log in' (top right corner)
- Use your EU Login (+ the app) to **register**



How to join the discussion group



- Scroll down to the COLLARIS2 group, click ‚Join group‘
- Share your knowledge and expertise!

Stay in touch!

- **UCPKN:** https://civil-protection-knowledge-network.europa.eu/projects/collaris2
  - Join our discussion group!
- **LinkedIn:** linkedin.com/company/collaris-network/
- **E-Mail:** Collaris-network@cbk.waw.pl

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