



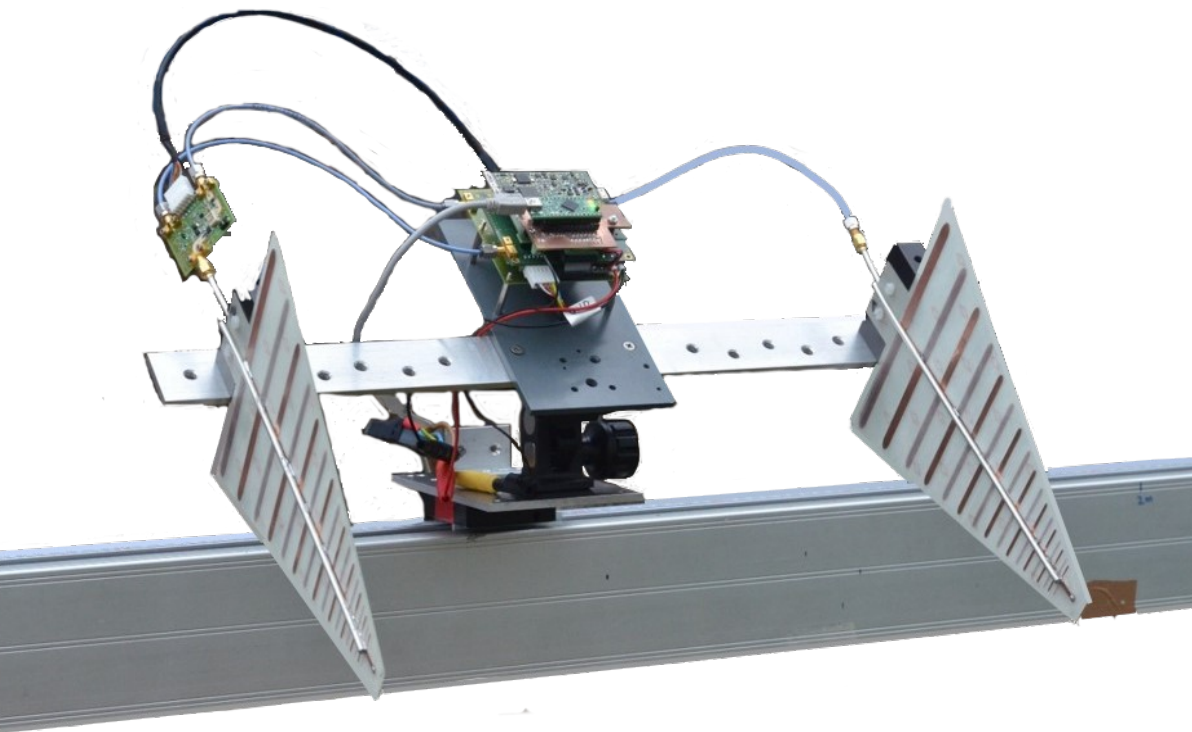
FindMine – by Urs Endress Foundation

UAS-based mine detection

Jean-Gyl Capt, Foundation Board Member

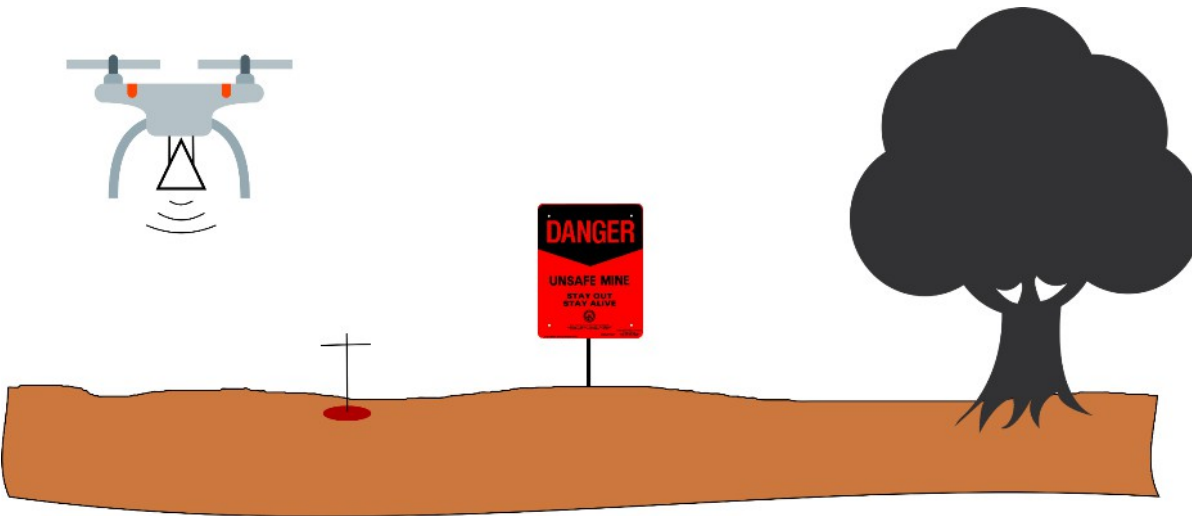
Target of the Urs Endress Foundation:

- Reduce the number of injured and killed people and increase the speed for deminers to reach their goals



Basic idea:

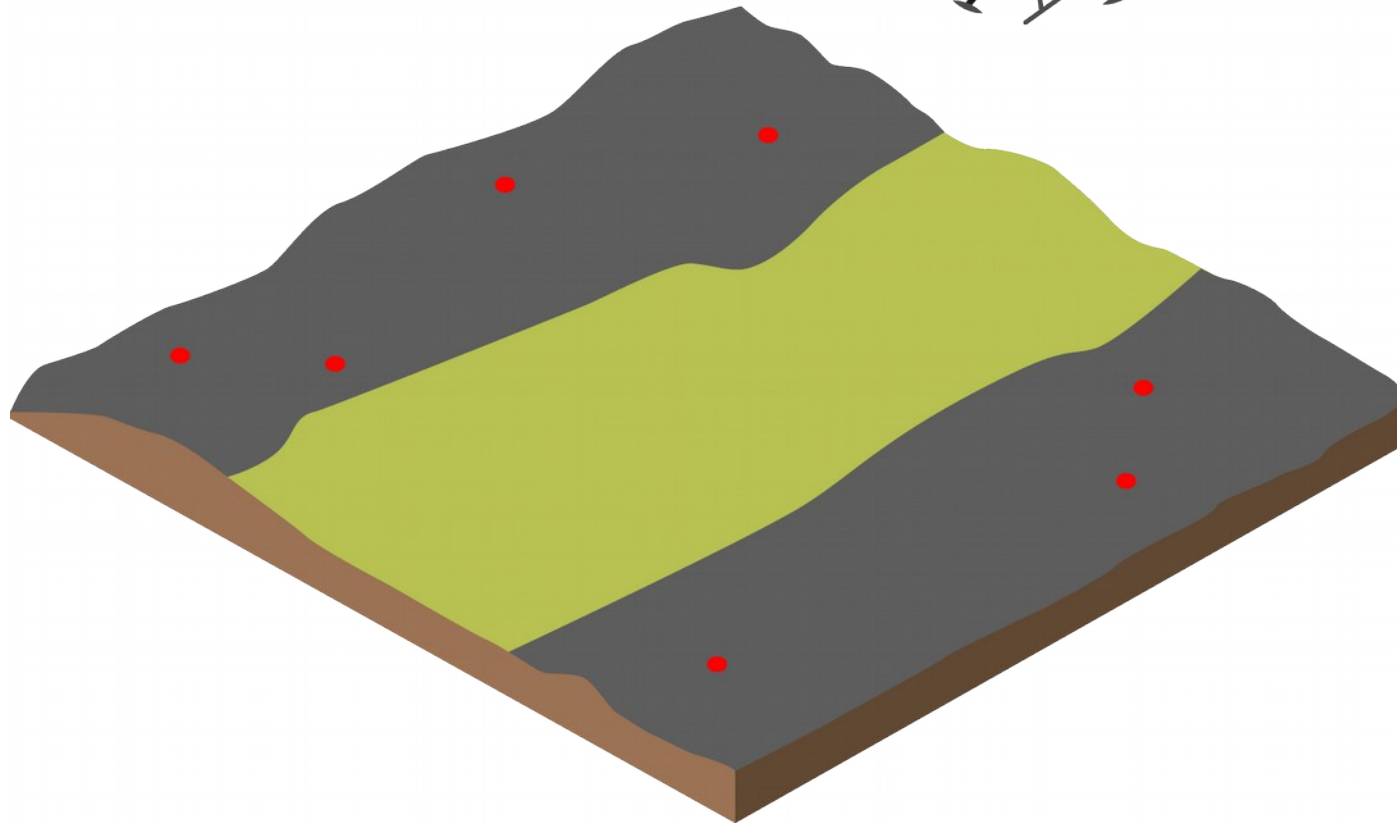
Ground
Penetrating
Synthetic
Aperture
Radar
(GPSAR) with low
energy and light
weight ...



Basic idea:

... GPSAR as its
prime sensor for
mine localization
mounted on an
autonomously flying
**Unmanned Aerial
System (UAS)**

FindMine 1: GPSAR ending 2019



Automatic mapping of the Suspect Hazard Area (SHA)-topography

- mines recognized by FindMine-**U**n**m**anned **A**erial **S**ystem (UAS)

FindMine 2:

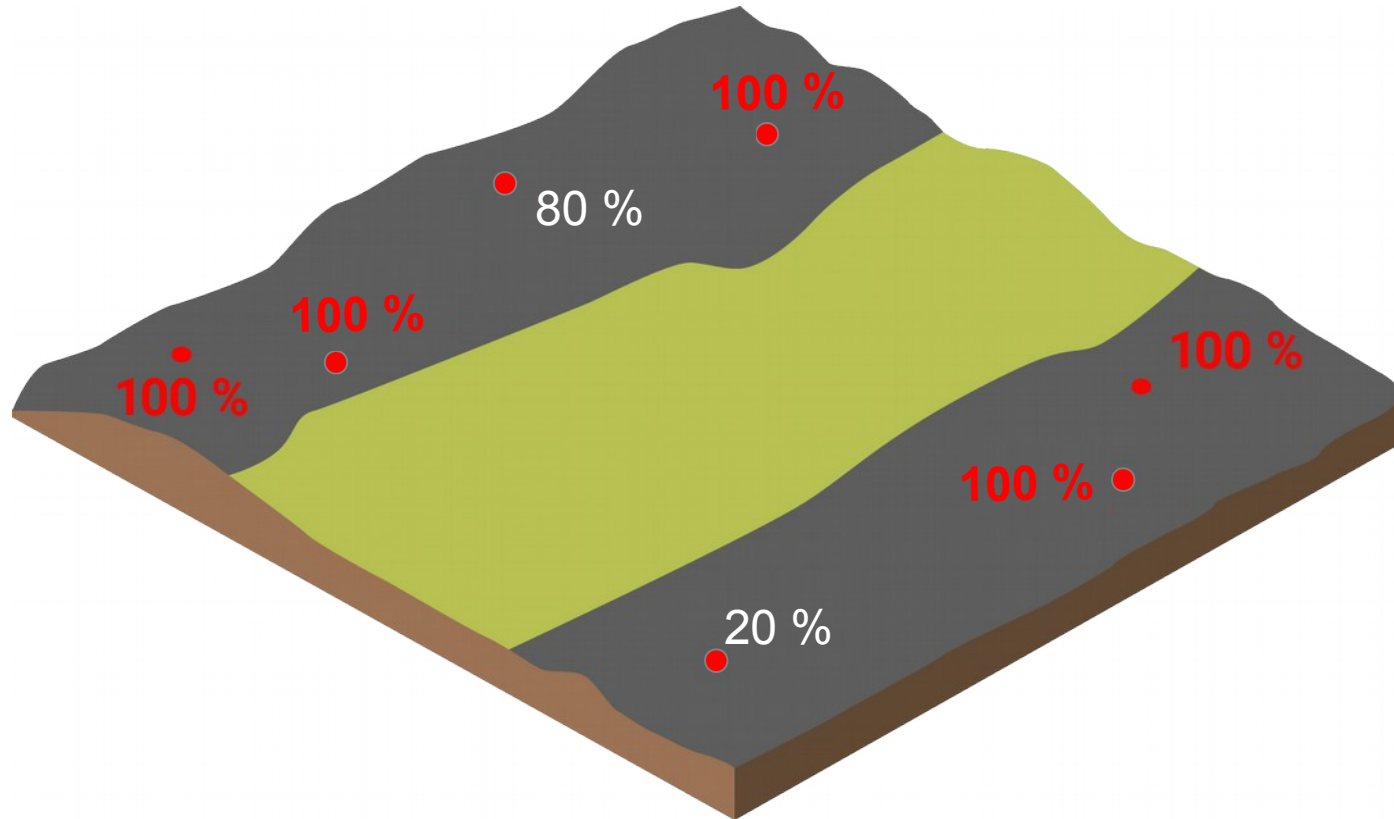
Integration of additional sensors ending 2022

Additional Sensors:

- Metal detector
- Gas detector
- Hyperspectral imaging
- Thermal imaging
- Evaluation of several sensing methods suitable for mine detection and as **Unmanned Aerial System (UAS)**-payload

FindMine 2:

Integration of additional sensors ending 2022



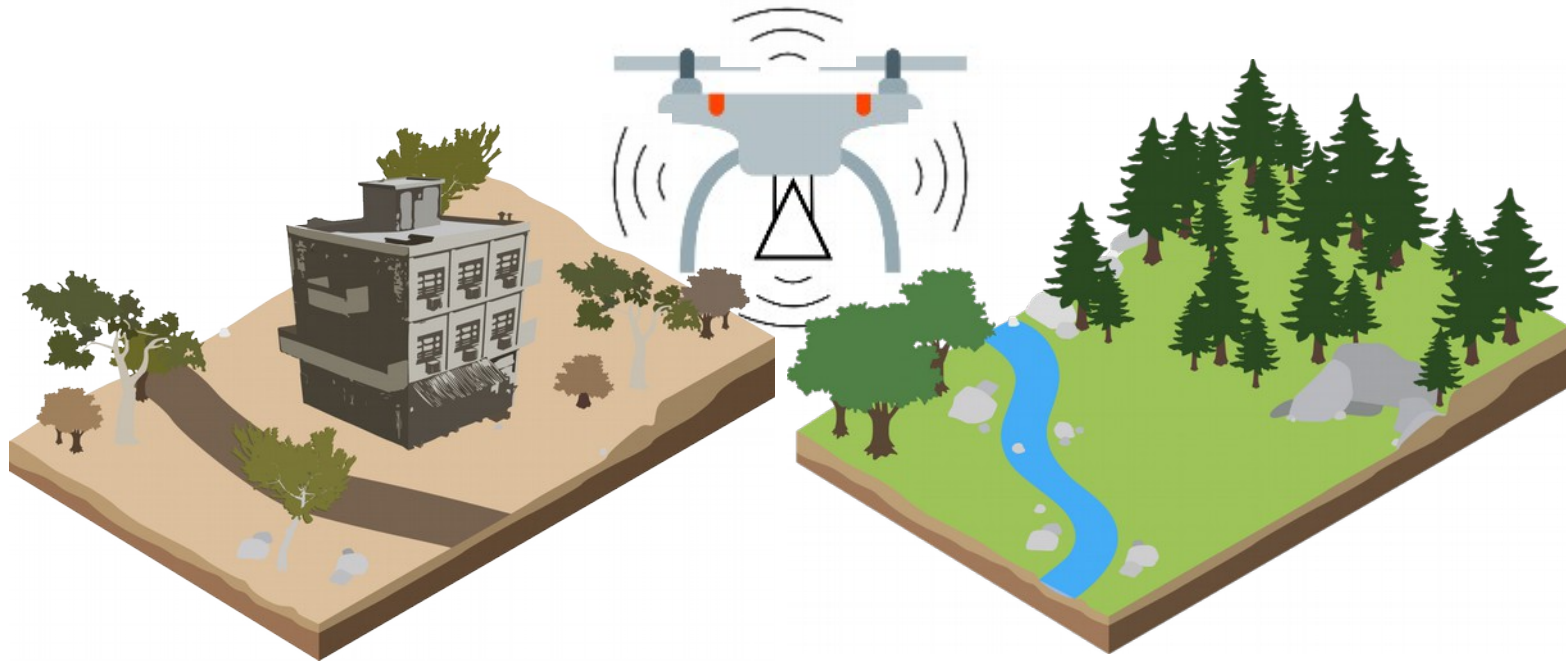
Evaluate found signals

- Determine % of likelihood of mines

➔ Increase the probability up to 99,7%

FindMine 3:

Increase flying capabilities ending 2025



Building

Forest



**Flying into suspected buildings and
dense forest / jungle**

FindMine's Vision

Make the world safer by helping to get rid of mines and **Unexploded Ordnances (UXO)** with recent technologies and to support:

Suspected Hazardous Area (SHA) Identification

Land Release

Completion and Mapping

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