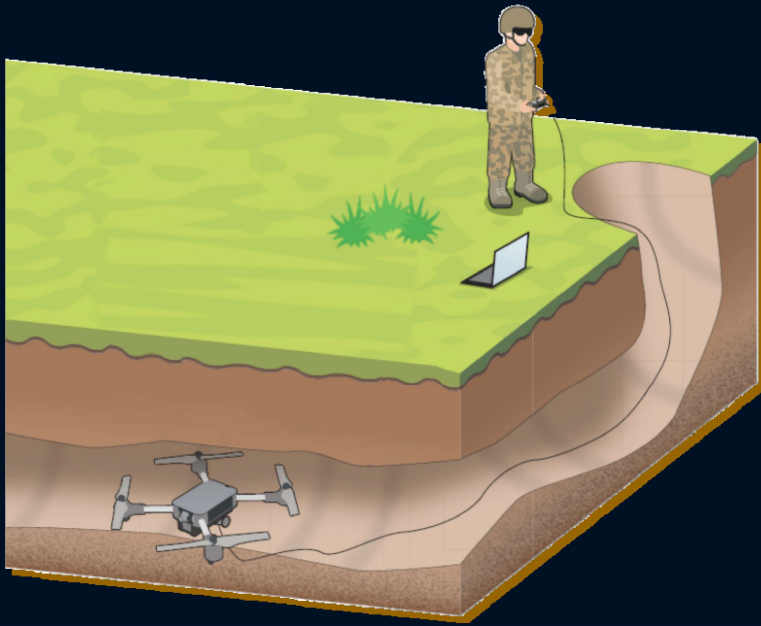
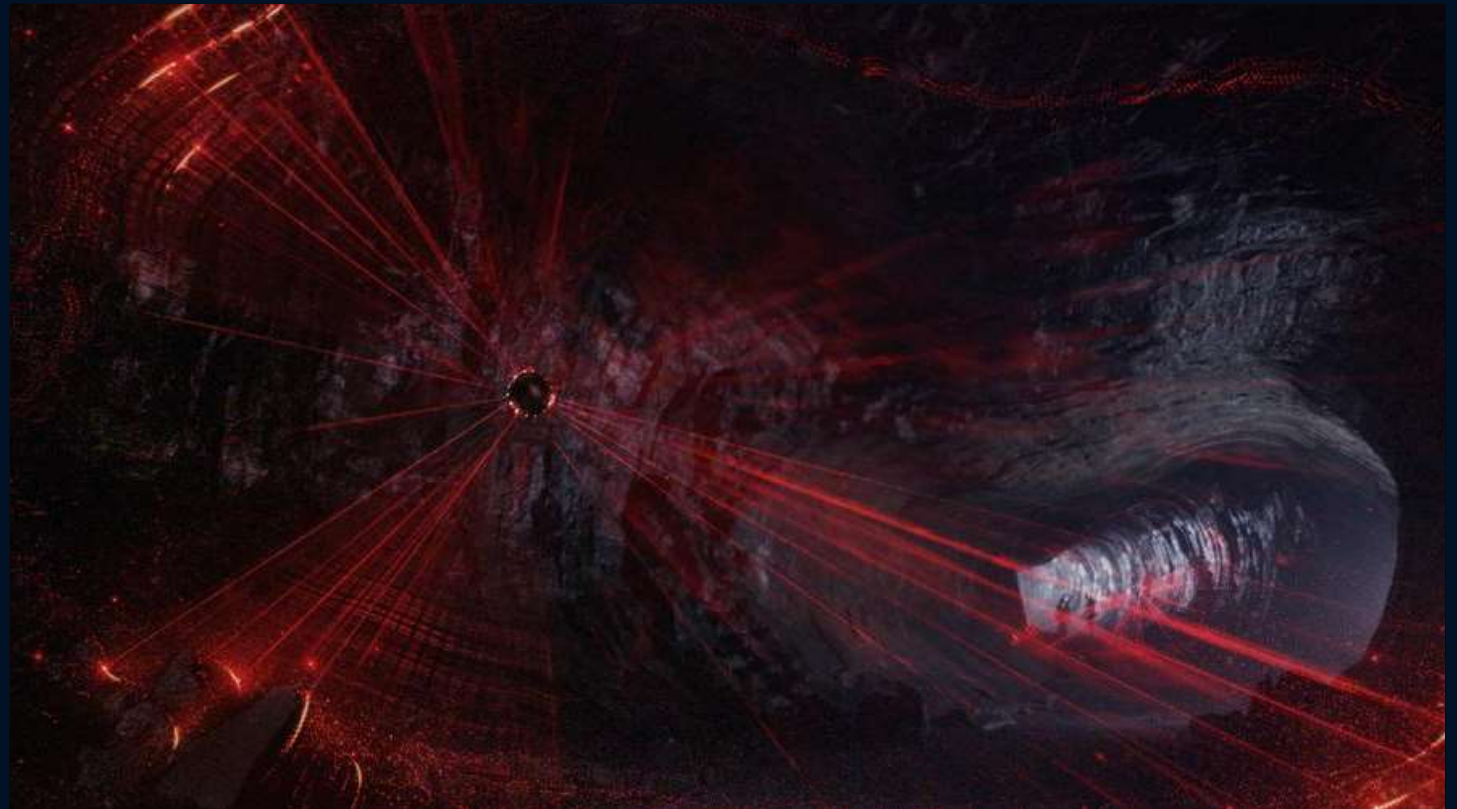


U-Drone



Eduard IJsselmuiden

PROMETHEUS (2012)

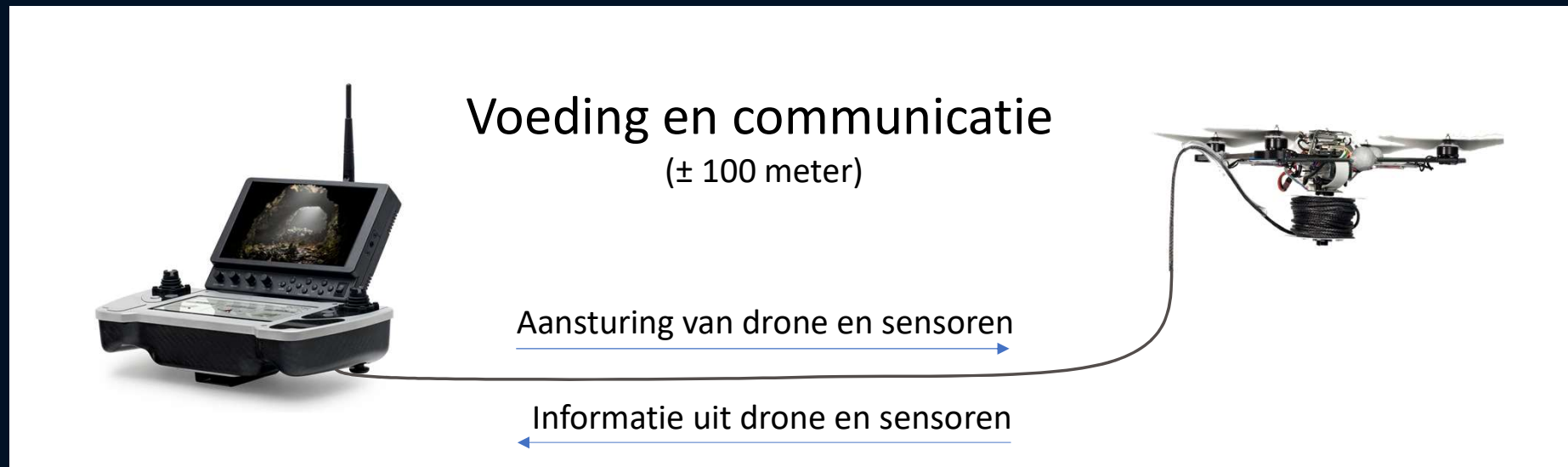


Drones

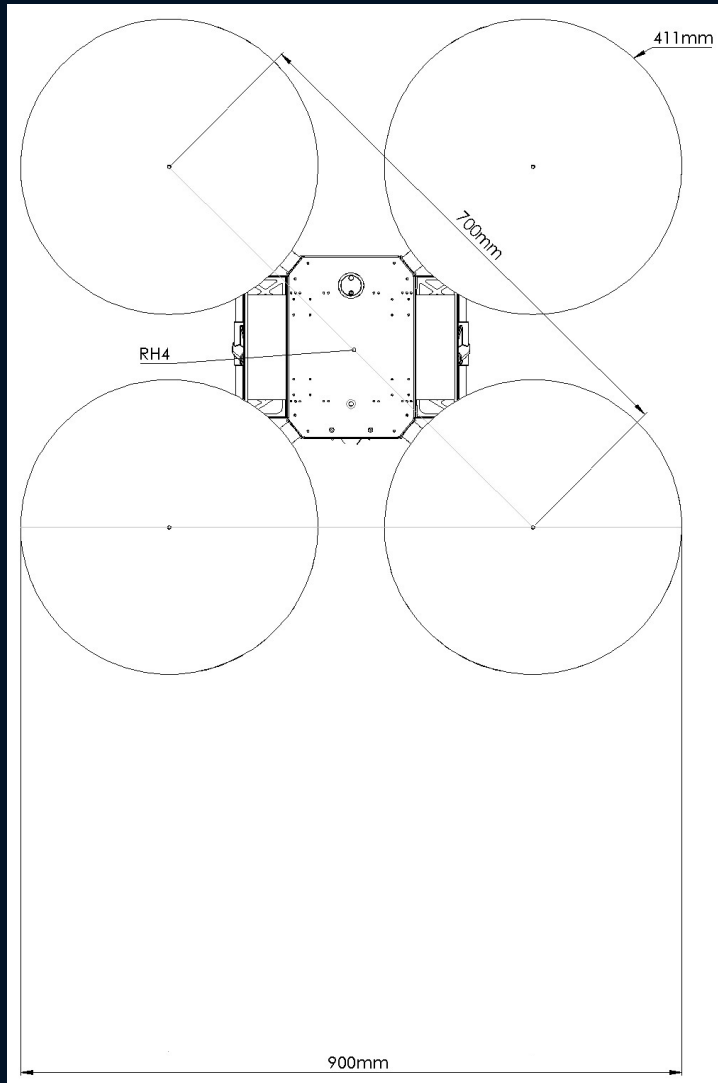
- geen GPS
- slechte data-/videoverbinding
- korte vliegtijd
- makkelijk te verstoren (jammen)
- moeilijk te besturen

U-Drones

- Underground
- Unlimited
- Unjammable
- User-friendly
- Unearthing



U-Drone



RH4 'Spyder'

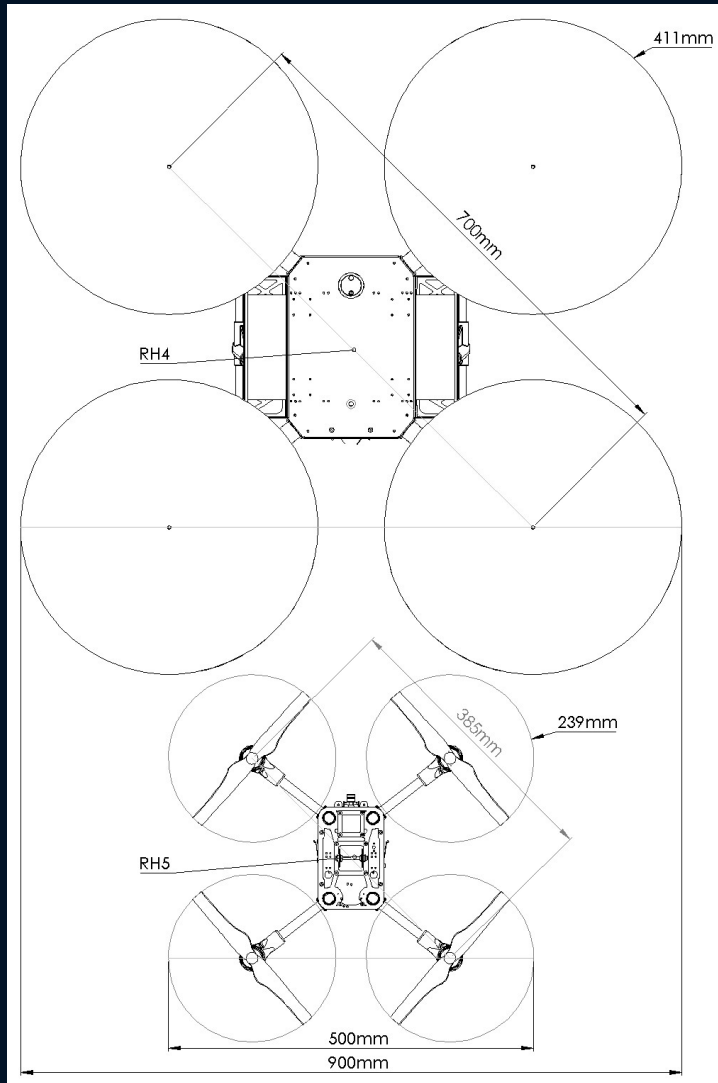


Delft Dynamics

CableCopter

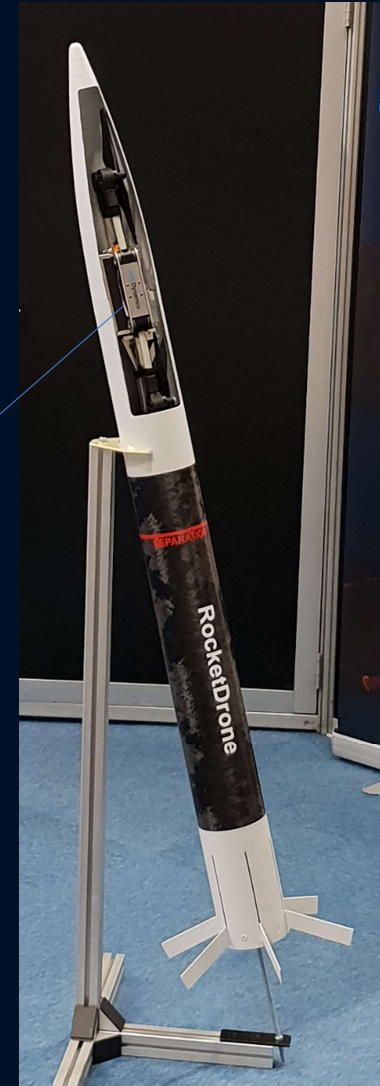
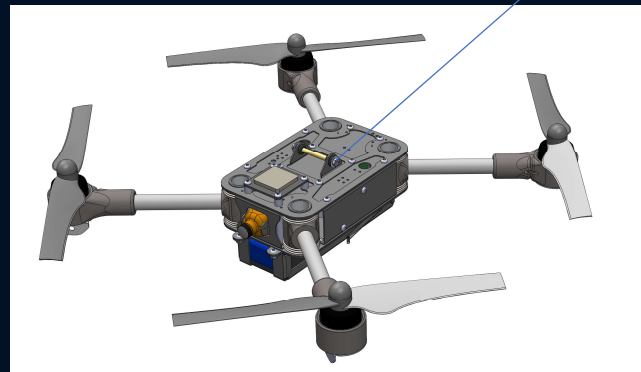


U-Drone



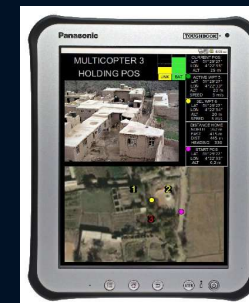
RH4 en RH5

DelftDynamics



U-Drone

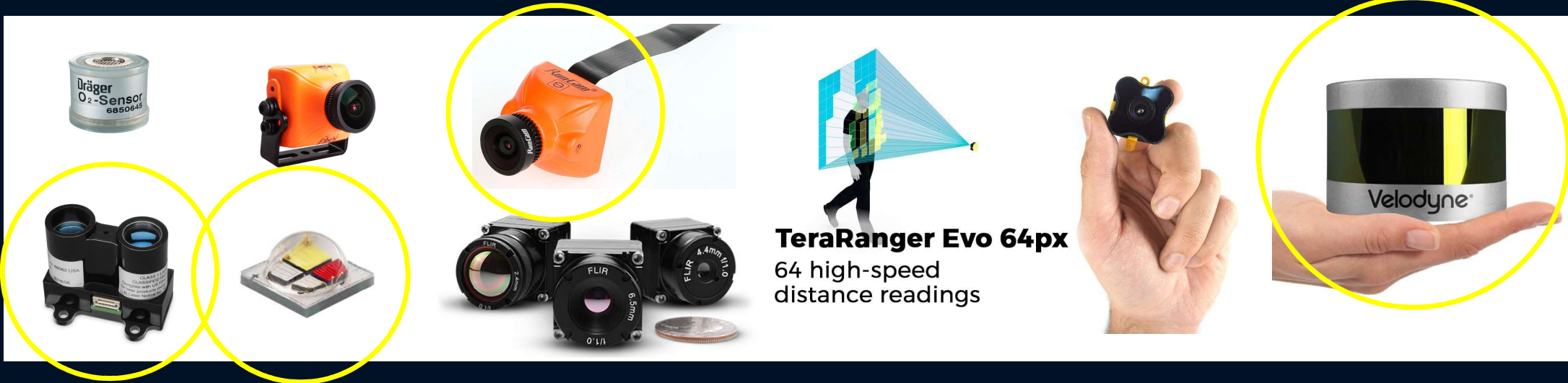
DelftDynamics



U-Drone

Sensoren

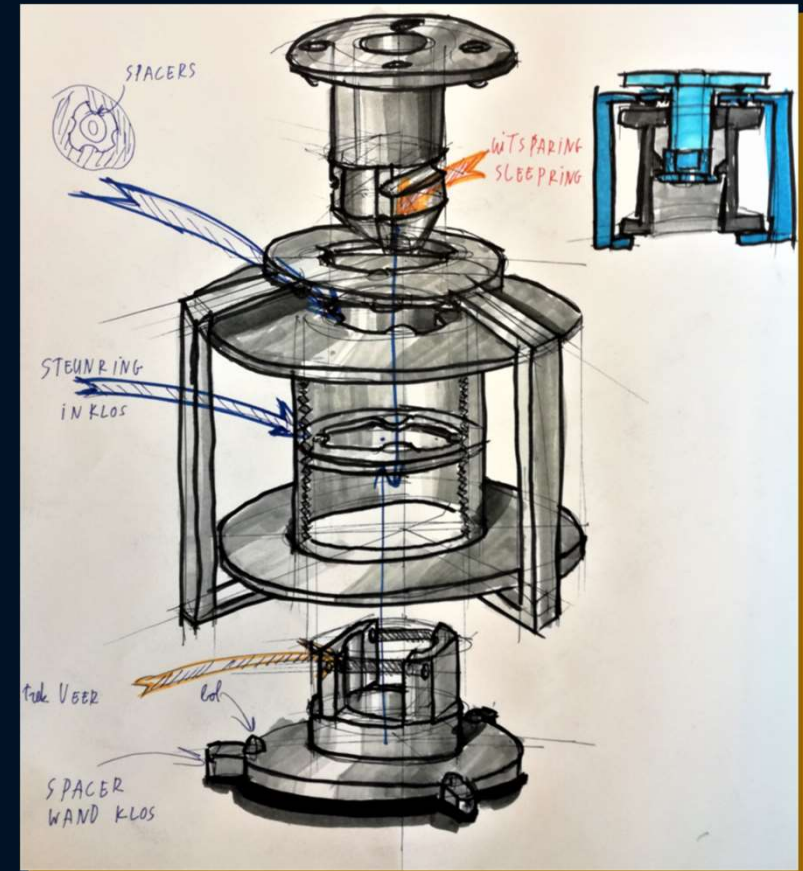
DelftDynamics



SLAM : Simultaneous Localization And Mapping

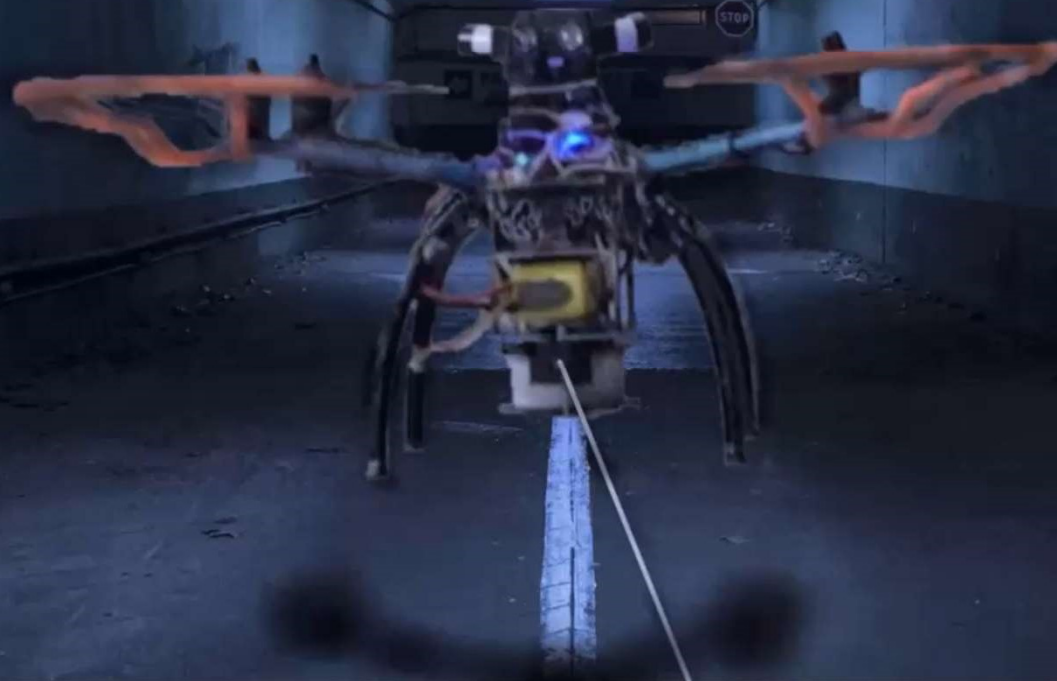
Stappen

- Microkabelselectie, testen
- Kabelhaspel, testen
- Video, verlichting, data over kabel
- Aansturing over kabel
- BVLOS testen

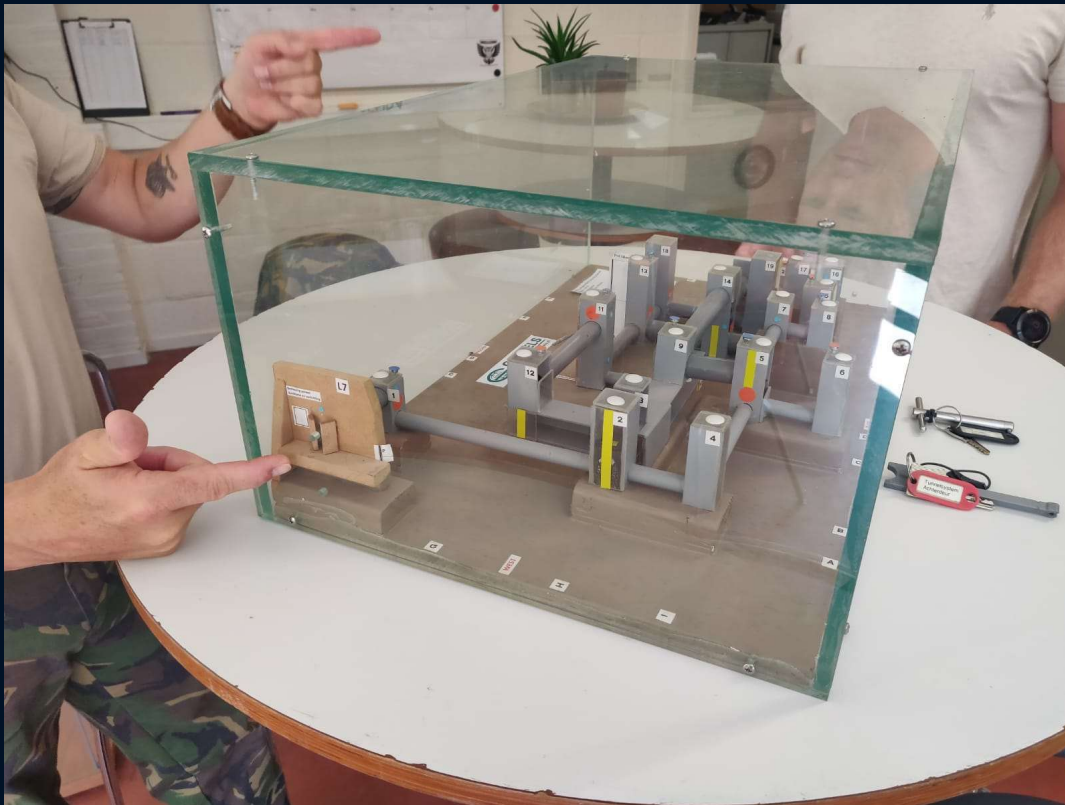


Delft Dynamics

U-DRONE



U-Drone





Veldwerkkkaart van het Noordelijk Gangenstelsel, opmeting Joep Orbons.

U-Drone



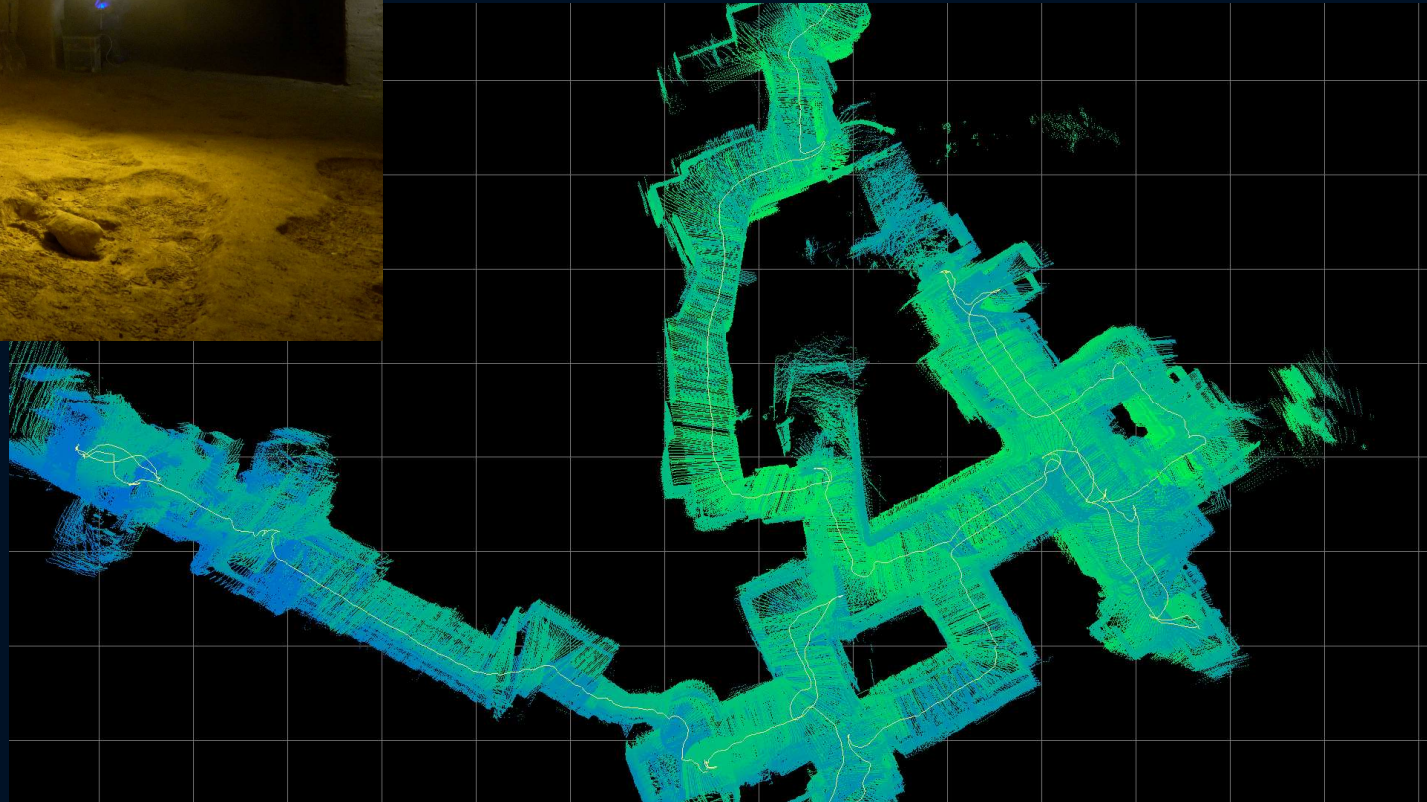
- Hand-held lidar + tracking camera

- Test in mergelgroeve

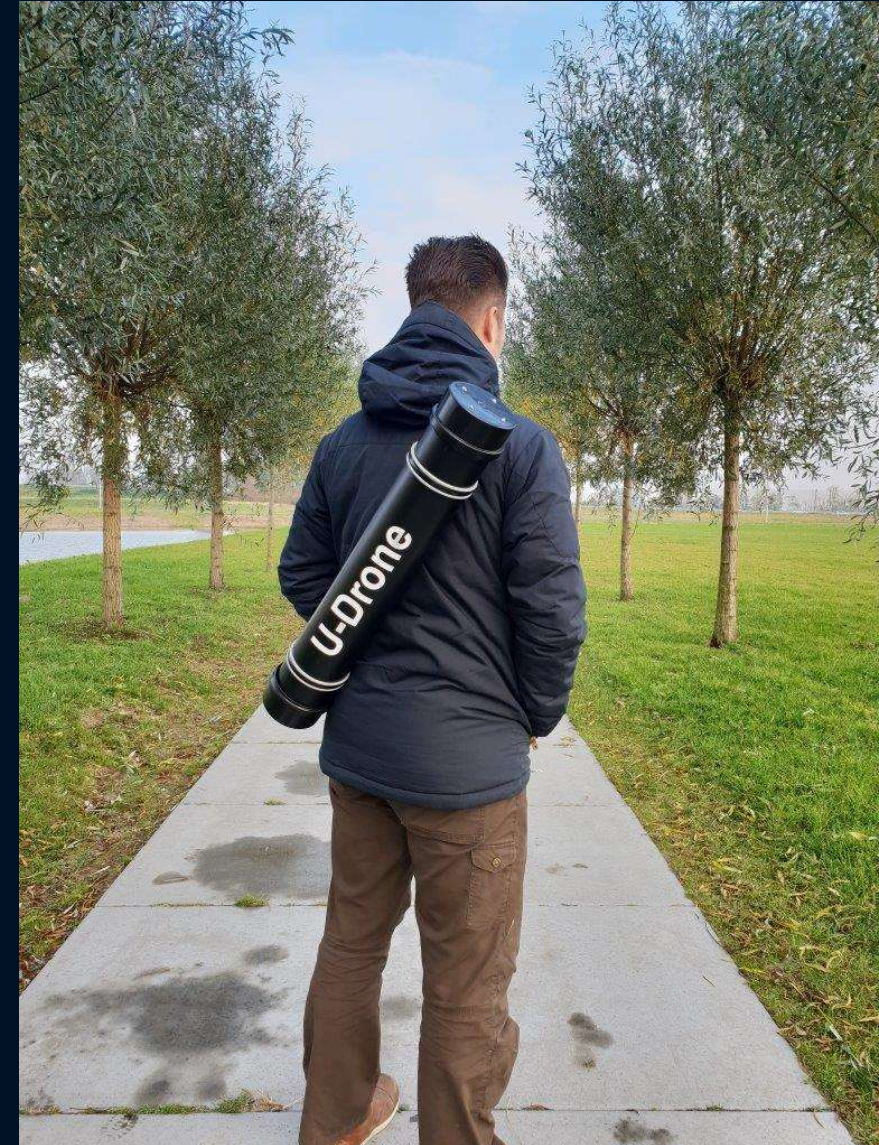
fps=20 bps=2006Kb



Delft Dynamics BV



- Verder gaan met SLAM technieken: testen en robuust maken
- Kabelsysteem: langere (200m/300m) of dunnere kabel (gewicht)
- Combineren van kabelhaspel, camera, SLAM sensoren in **compacte en robuuste drone**
- Portable grondstation
- Verspreiden en verwerken van kaart en video-beelden (real-time en post-flight)



Smart tooling – In besloten ruimtes

- U-drone inzetten in relevante omgeving:
 - **Non man-entry inspection**
- Uit zicht vliegen: Gebruik van combinatie van lidar + tracking camera op drone
- Q1, Q2 2020

