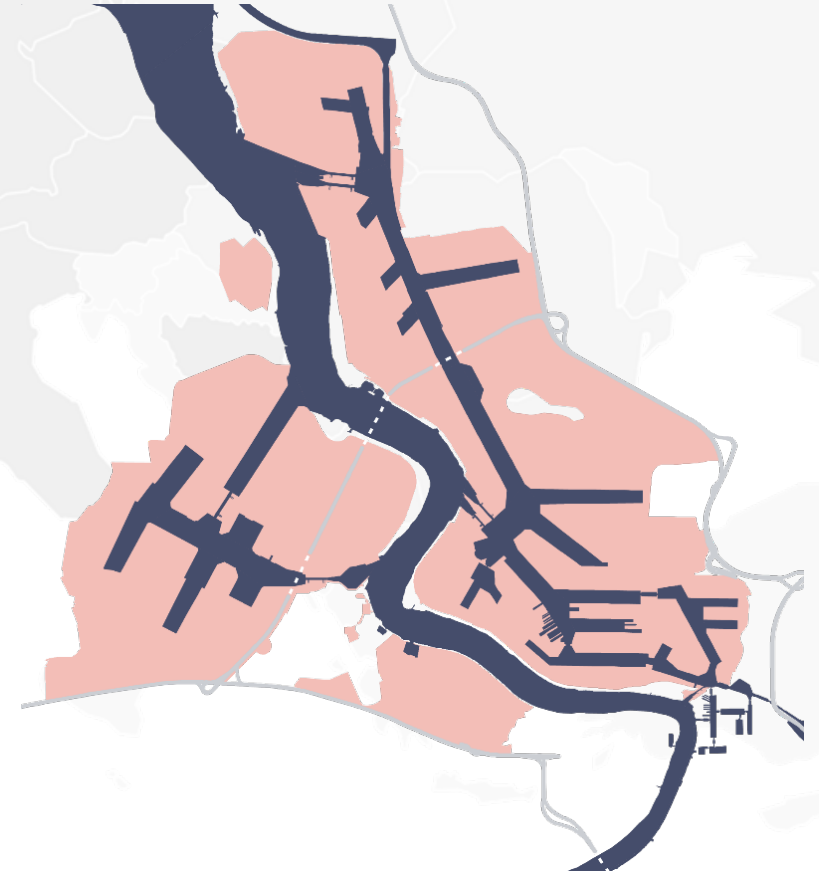
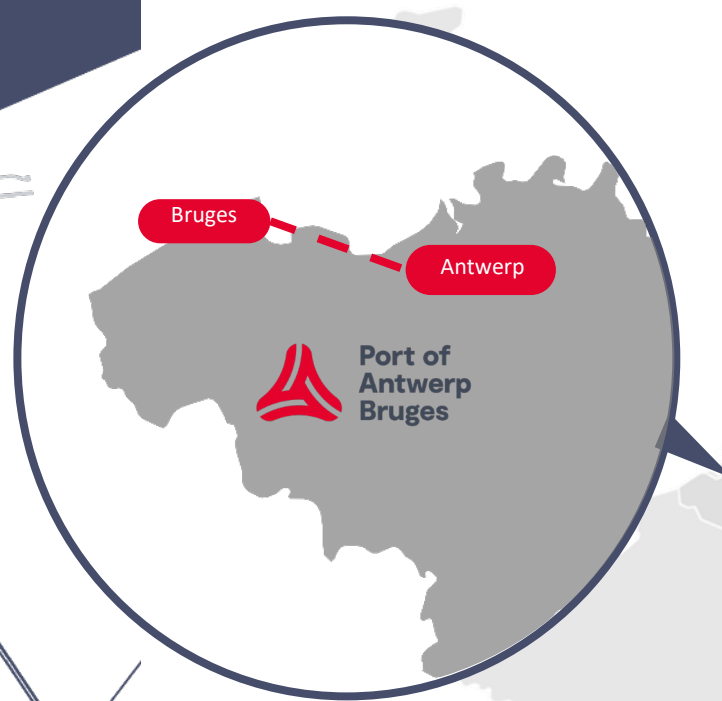
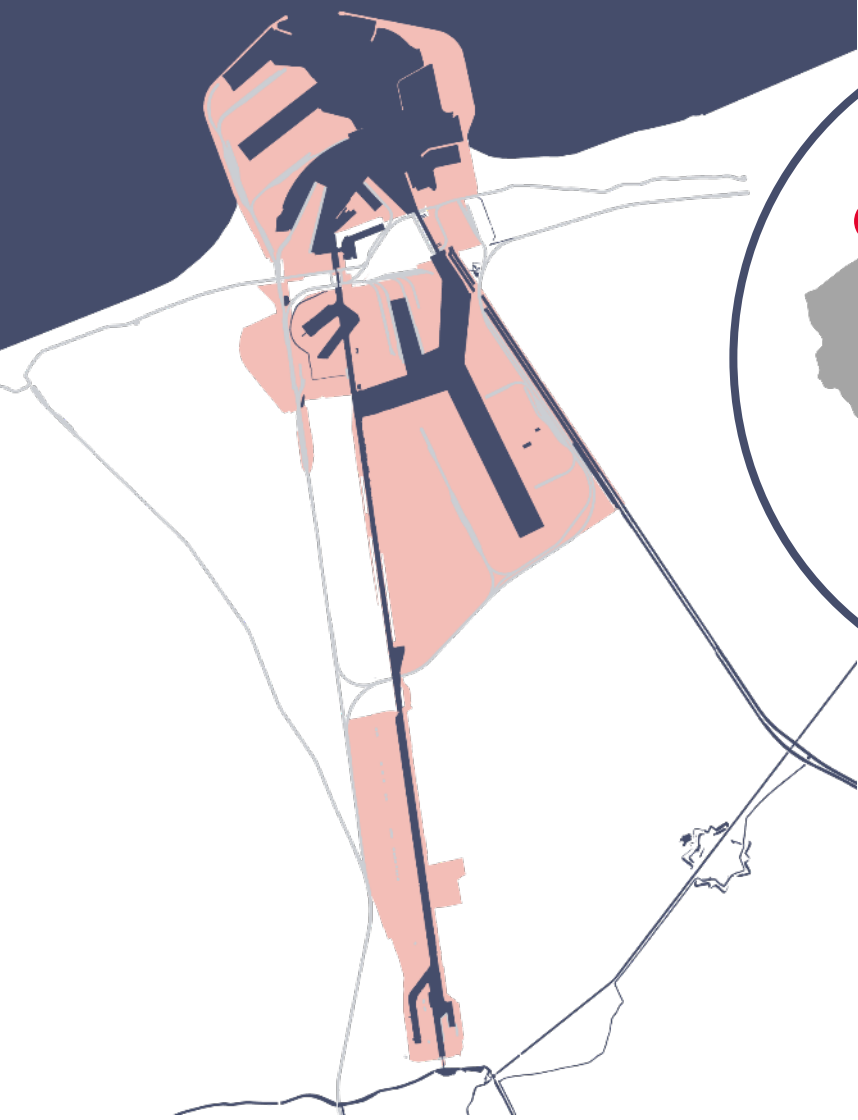


Drones @ Port of Antwerp Bruges



Port of
Antwerp
Bruges

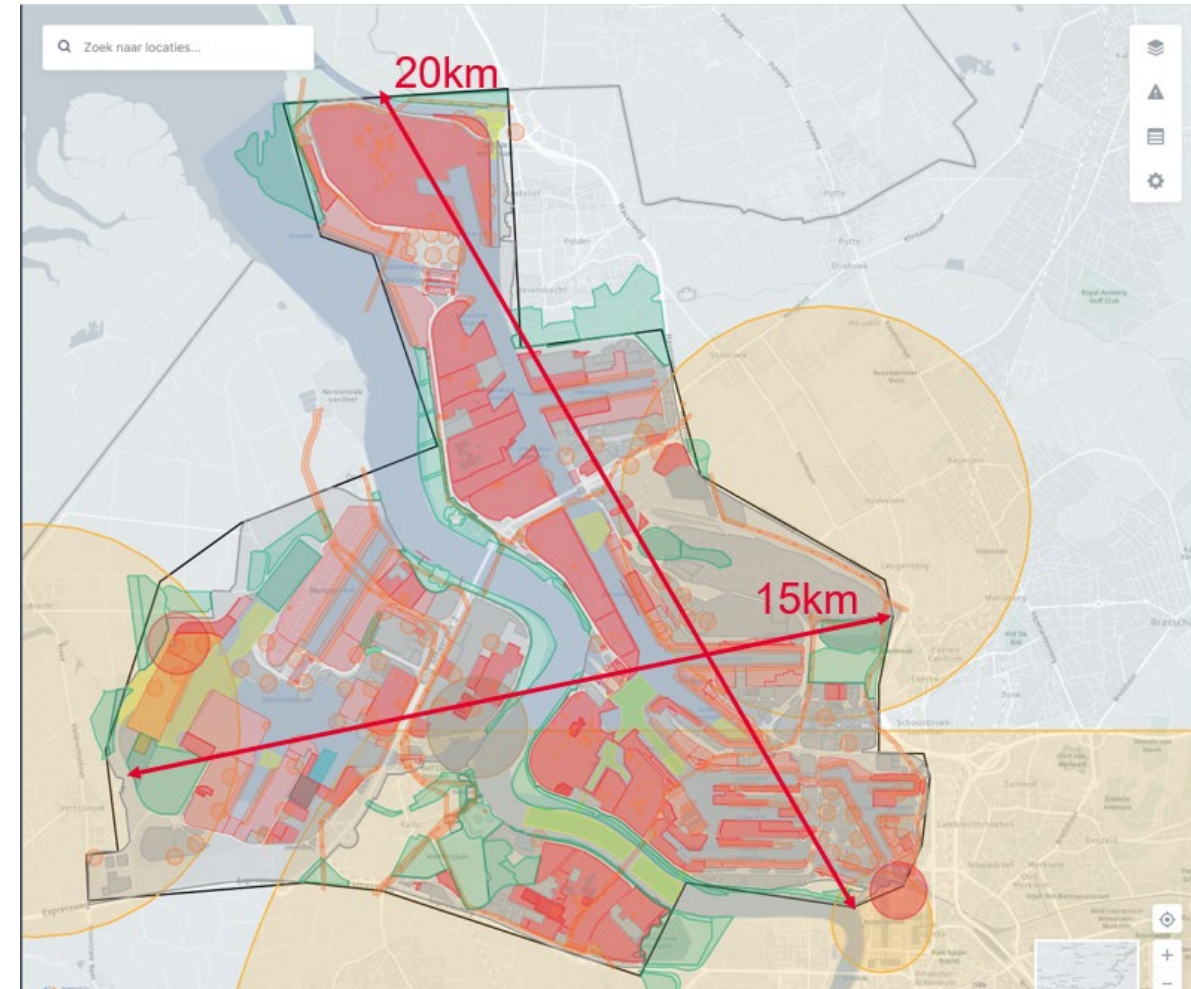
A global port in the heart of Europe



Port of Antwerp Geozone

- 120km² port area
- 900+ companies
- 15000 seagoing vessels & 50000 inland vessels/year
- Second largest chemical hub in the world
- 60+ windmills
- High tension lines
- 1 airport (CTR-overlap)
- 2 airfields / 2 heliports
- Nuclear Powerplant

Complex area & airspace



2018: Why Uospace ?

We have a dream !

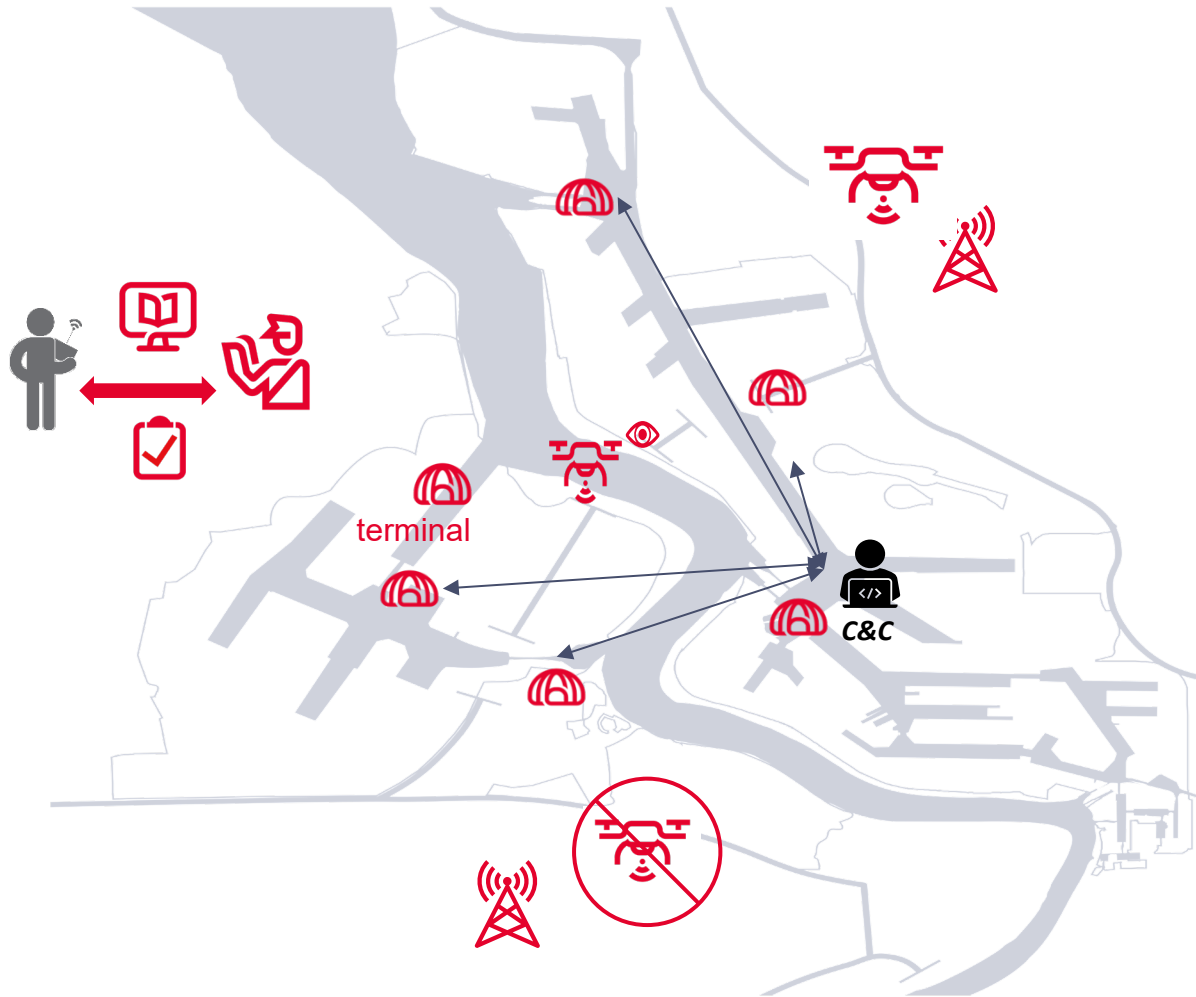


“The port of the future has a network of autonomous drones that fly beyond visual line of sight over the port area several times a day and transmit data in real time”

- Potential of drones for optimization operational excellence PoAB-authority
- Foundation to build drone innovation ecosystem
- Growing activity drone operations vs port safety & security
- Professionalization of role “Geozonemanager”

legal framework for scalable and safe (BVLOS) drone activity

2024: Pre-Upspace operations

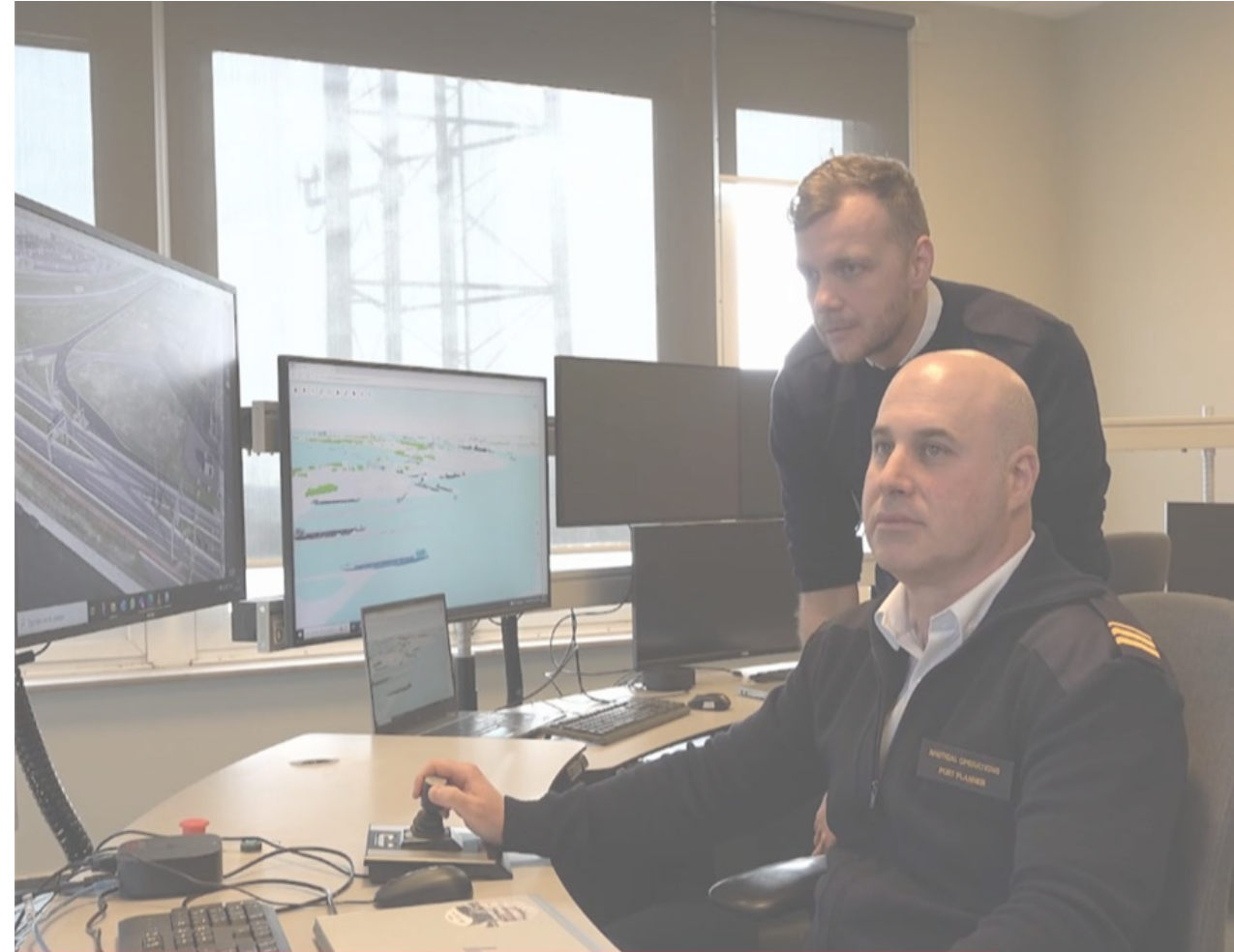


- D-Hive BVLOS D-Hive network PoAB
6 Drones & Command & Control Center
 - Drone flight authorisation via droneportal
 - Compliancy via Unmanned Traffic Management
 - Drone & ATM monitoring infrastructure
 - Non-Compliant Drone detection infrastructure
-
- 4 authorized BVLOS operators
 - **6000+ BVLOS flights since 2023**
 - 6000+ flight authorizations since 2020

“Pre-Upspace in operation”

Lessons learned

- Build a multidisciplinary ecosystem
- Involve legal partners from the start
- Don't underestimate the change management
- Conceive with evolution in thought
- Evolve from “risk mitigation” to “risk control” mindset
- Look beyond “Airspace” and “Business driver” for Uspace



Thank You



Port of
Antwerp
Bruges