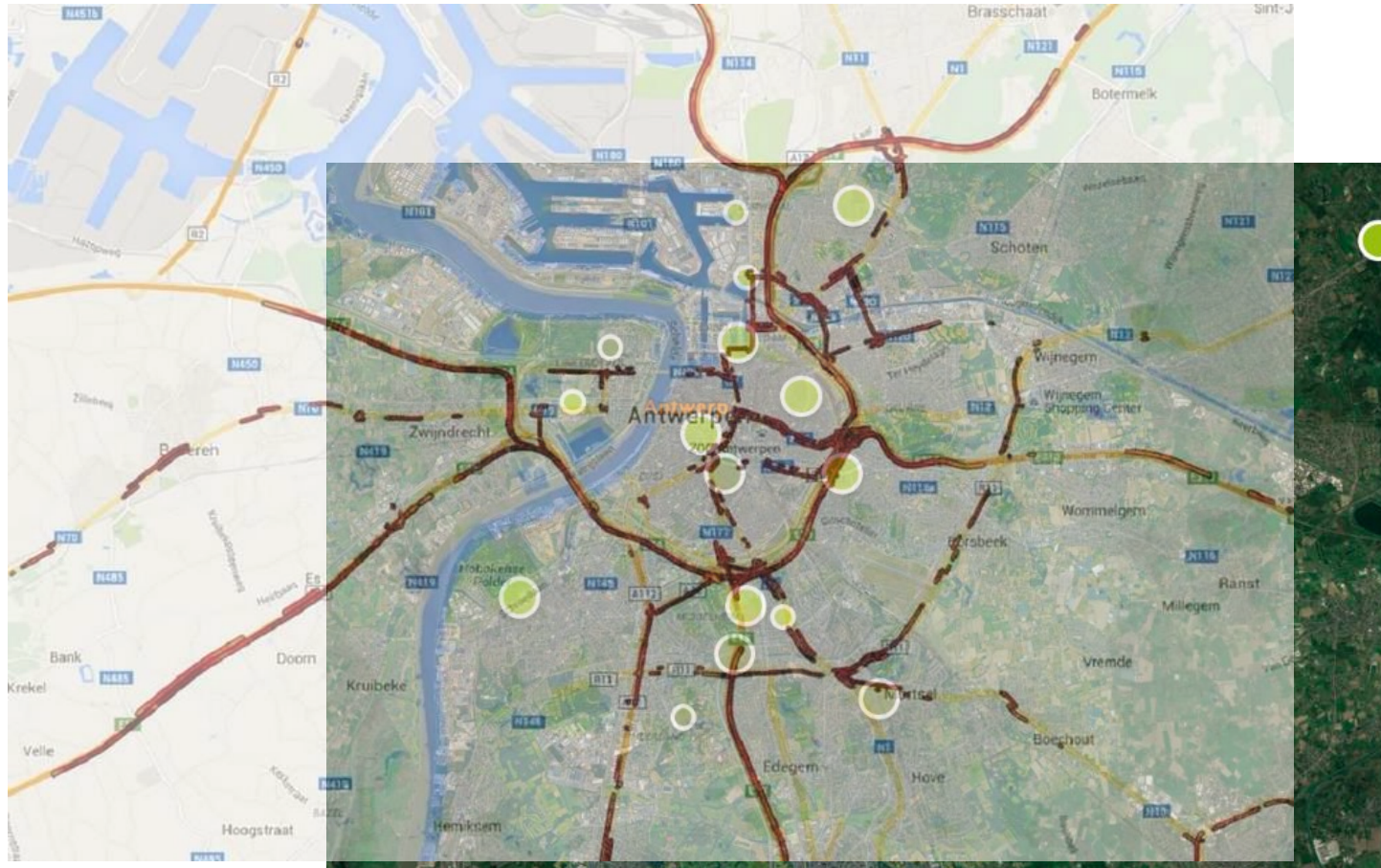


« Medical » drones

[Willeke Dijkhoffz – CEO GZA / president network GZA&ZNA]

SAFIR-Med Conference & Demo Event
Port House, Antwerp, 02 juni 2022

GZA & ZNA hospital network: 17 sites in Antwerp with 3.500 beds



GZA & ZNA hospital network: sites in Antwerp

Study protocol (approved by the Ethics committee)

6 x 6



35 mL



Conclusions of the blood samples transport by drone

- Each flight
 - ± 30 minutes (equivalent of 30 km flight)
 - 3 take-offs and 3 landings
 - Forced pitching, rolling and yawing
 - Temperature monitoring
- Our study showed
 - No effects on sample integrity
 - Minor hemolytical effects
 - No effects on blood grouping
 - No effects on RT-PCR (DNA bacteria)
 - No effects on majority of the hematological and biochemical parameters
 - Limited effects on some biochemical parameters (ions: Sodium, Potassium, Calcium) ~ other published data.
- **Transportation of clinical samples by drones is very promising**

Why drones?

Drones will be one of the key enabling technologies within Smart Healthcare Ecosystems to deliver fully “Integrated Care” beyond the walls of Hospitals Of the Future ...

- Telehealth and high speed diagnostics;
 - Acute medical interventions (..)
 - > drones performing an initial triage from a distance before other critical resources are called in..
 - Teleconsultation combined with delivery of medical supplies (p.e in harbor area's)
 - Timely organ / blood transports
 - Transports; blood samples, tissues ..
- Improving quality and patient safety:
 - lab samples faster analyzed, pharmaceutical preparations sooner available for the patient,
 - improved operational productivity,...
- Medical cargo drones
- Societal sustainability : quicker, shorter, reliable, ecological, ...
- Important : cybersecurity with strong and solid data governance (& integration)



THANK YOU FOR
YOUR ATTENTION

