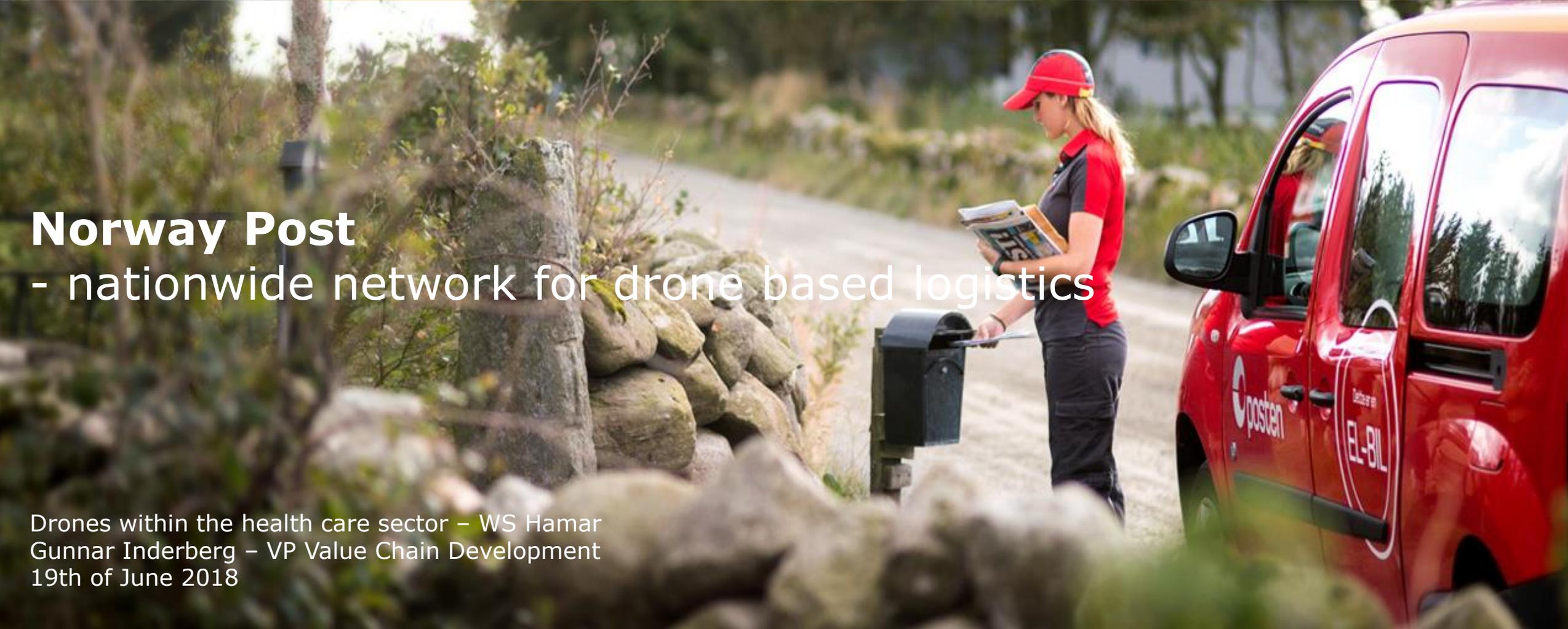




Norway Post

- nationwide network for drone based logistics

Drones within the health care sector – WS Hamar
Gunnar Inderberg – VP Value Chain Development
19th of June 2018



Agenda

- Who we are
- What we bring to the table
- Where do we see potential use-cases for drones in logistics?
- What will it take going forward?

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Norway Post – Key Figures Mail Division - operations

Delivery Services – Mail Segment

■ Population	5.1m
■ Letter boxes	2.4m
■ Geography	2,600 km
■ Net FTE – delivery/mail.div	3650 (delivery) / 6500 (mail div)
■ Delivery Routes	2,800
■ Delivery days a week	5
■ Yearly distance	55m km (lastmile mail)
■ Volumes delivered (2015)	
– Addressed Mail	0.7bn
– Unaddressed Mail	1.0bn
– Parcels	45+m
■ Sorting Centres	3
■ Post offices	40
■ Business Centers	24
■ Post in Shop	1400



Norway Post operate two brands; Posten and Bring



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Norway Post has an unparalleled nation wide infrastructure



Posten nettverk

Norway Post infrastructure:

- 18 sorting centers
- 300 delivery centers
- 4600 vehicles



Robust

Flexible

Scalable



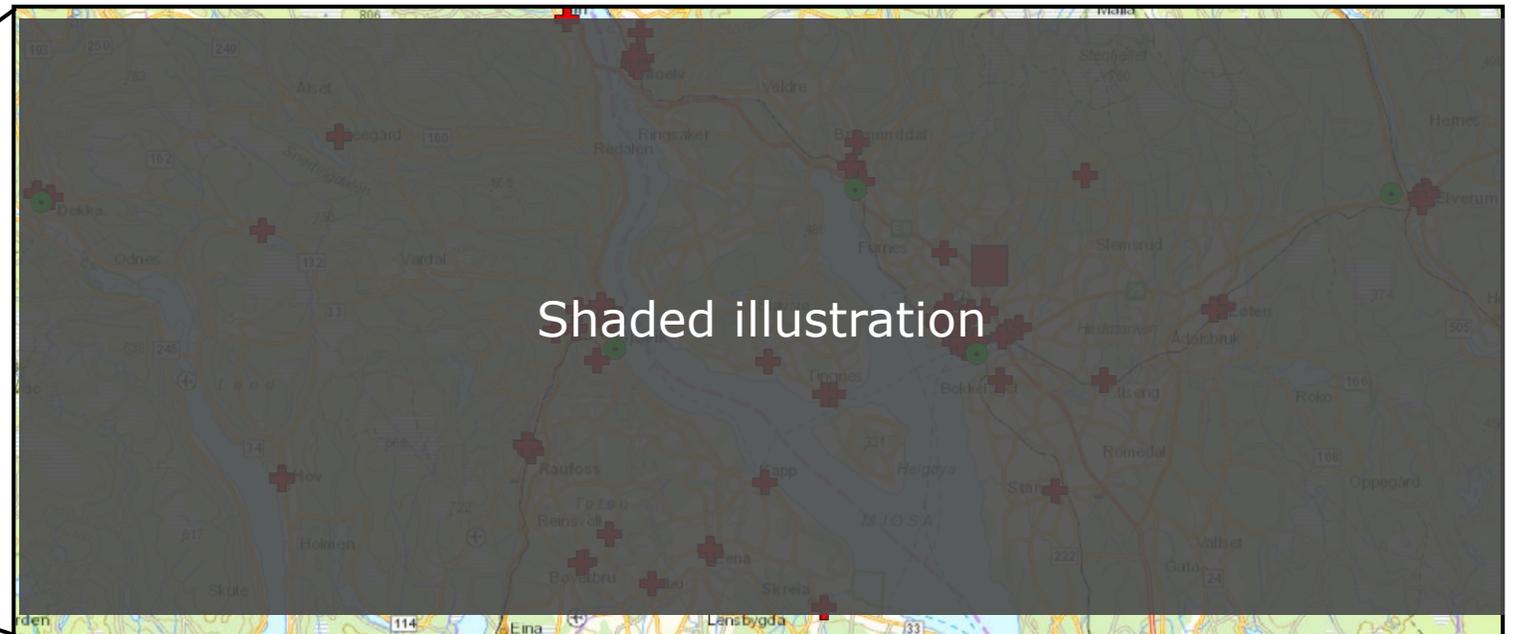
Case example

- mapping Norway Post infrastructure with local health areas of interest

- Norway Post infrastructure can be activated where there is an economical viable foundation for an express network with drones



Posten nettverk

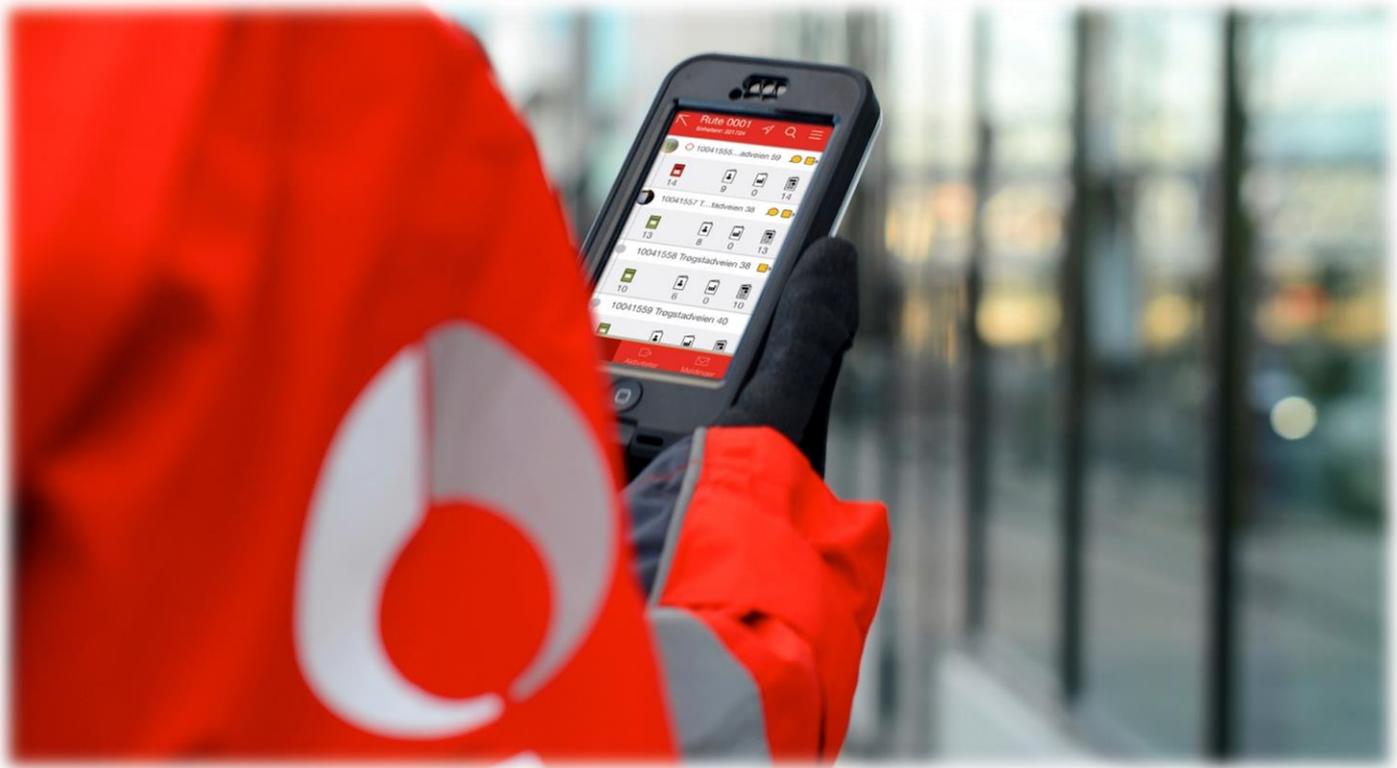
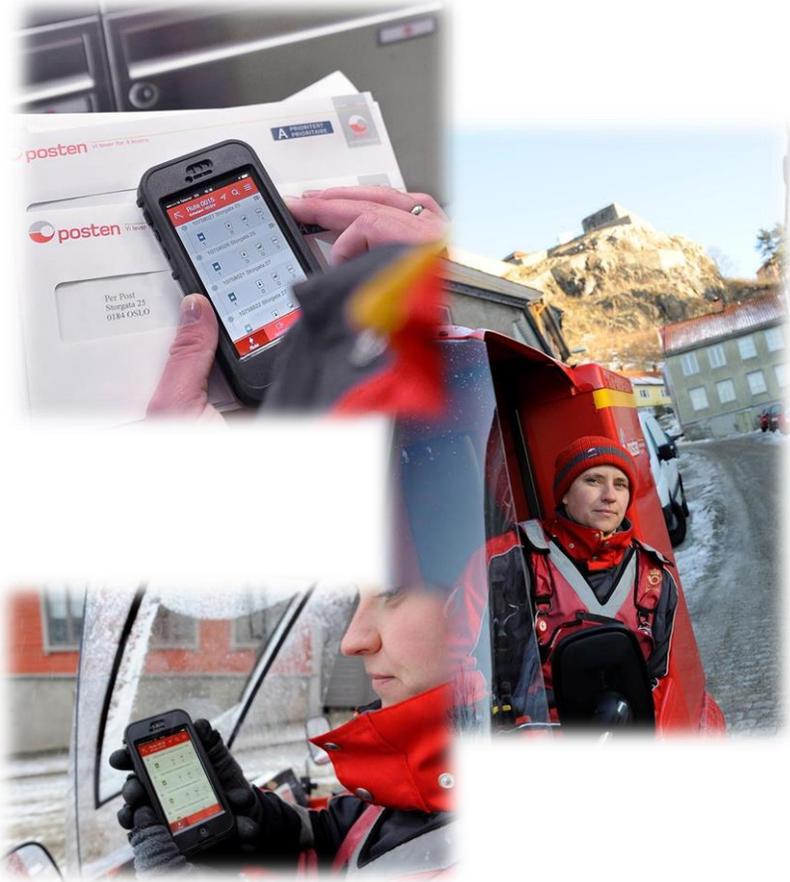


Vans/vehicles as potential extended landing and take-off facility

- Will it reduce lead-time?
- Will it increase flexibility?



Booking solution - Track and track – Proof of delivery



What can Norway Post potentially bring to the table?

- 1 Nation wide network/infrastructure
- 2 Seamless integration of air and ground logistics (including fall back plan for air operations)
- 3 Booking system + track and trace capabilities including proof of delivery etc
- 4 Consolidator for different logistics use cases
- 5 Trust and reliability from extensive experience with large scale ongoing logistics operations
- 6 Capacity to participate in development activities

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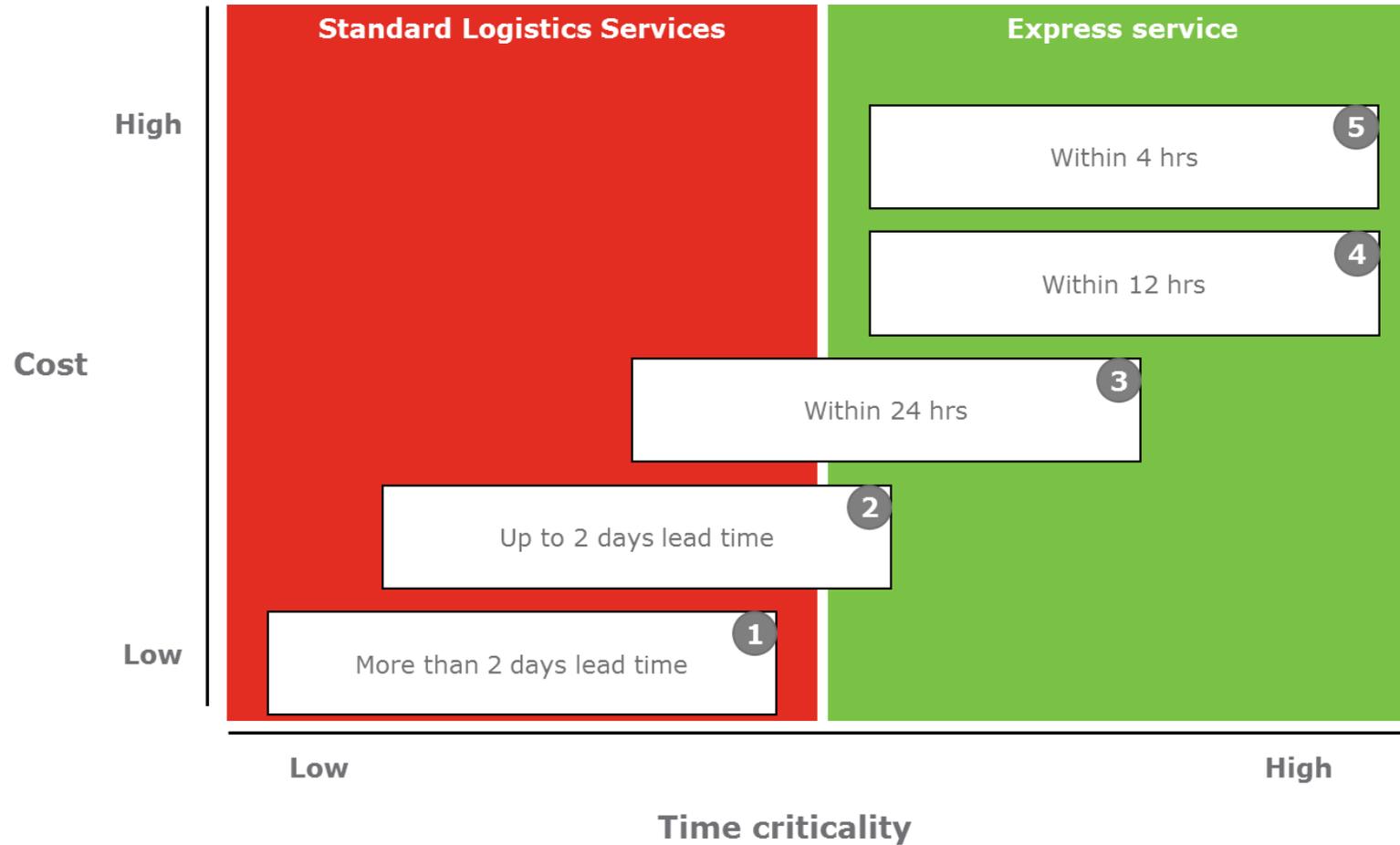
What are the use-cases for drones in Logistics?

1 Time critical deliveries

2 High cost to serve

Potential use-cases for drone deliveries #1

- time critical deliveries



Potential use-cases for drone deliveries #2

- remote areas with current high cost to serve

- 2,4 million delivery points
- some of very remote/isolated (islands, farms etc)
- Møsvatn in Telemark case example



Potential use-cases for drone deliveries in general

- asset utilization will be critical for financial viability

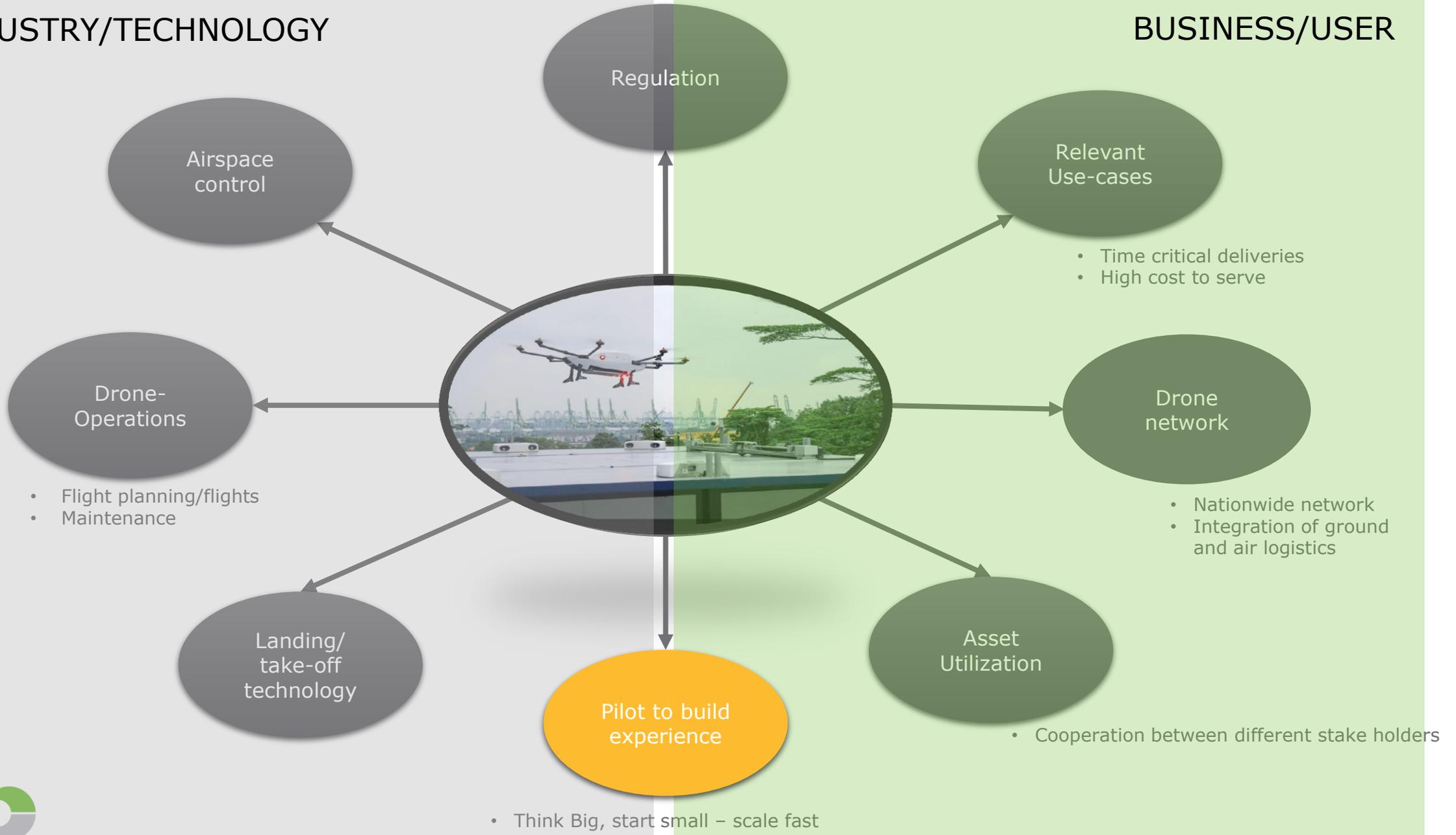


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INDUSTRY/TECHNOLOGY

BUSINESS/USER



Thank you for your attention!



Gunnar Inderberg
Head of Value Chain Development – Norway Post, Mail Division
gunnar.k.n.inderberg@posten.no

