

CONTAINERISATION IN CITY LOGISTICS



JOS SLUIJSMANS



- Cycling consultant
- Cycling promotion
- Cycling events
- Cycling is fun



Dutch
Bicycle
Centre



INTERNATIONAL CARGO BIKE FESTIVAL 14 -16 JUNI 2019



**GRONINGEN
CYCLING CITY**

**INTERNATIONAL
CARGO BIKE
FESTIVAL
GRONINGEN**

**14 - 16 JUNE 2019
GRONINGEN, NETHERLANDS**



LEVV-LOGIC



LEW-LOGIC

**RESEARCH INTO THE APPLICATION OF LIGHT ELECTRIC
FREIGHT VEHICLES INCLUDING E-CARGO BIKES**

**RESEARCH INTO THE POTENTIAL OF LEFV FOR SPECIFIC
FLOWS IN CITY LOGISTICS**

DESIGN OF NEW LOGISTIC CONCEPTS

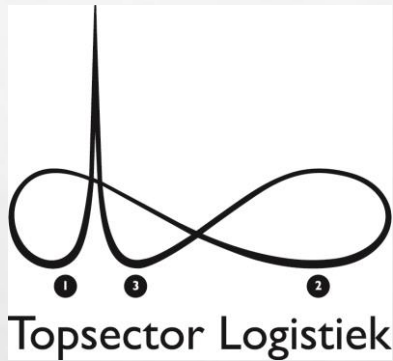
**TRANSLATE REQUIREMENTS OF LOGISTICS INTO
TECHNICAL DESIGN**

EXPERIMENTS WITH NEW LEFV-CONCEPTS

**OBJECTIVE: COST-EFFECTIVE DEPLOYMENT OF LEFVS FOR
CITY LOGISTICS**

RIPPL

REGISTER OF INITIATIVES IN PEDAL POWERED LOGISTICS



- **CONTAINERISATION**
- **HEAVY DUTY COMPONENTS**
- **FOOD**
- **WASTE**
- **MOBILITY AS A SERVICE**
- **CARGO BIKE SHARING**

WWW.RIPPL.BIKE

CITIES FOR PEOPLE

- **8-80 CITIES – GIL PEÑALOSA – SAFETY**
- **TRIPLE A – ACCESABILITY FOR ALL AGES AND ABILITIES**
- **ARCHITECTING INTERACTION – STEPHANIE AKKAHOUI HUGHES – COMMUNITY BUILDING**
- **VELOTOPIA – STEVEN FLEMING - THE CYCLING CITY**



CARGO BIKES

- **DON'T GET STUCK IN TRAFFIC**
- **CAN TAKE SHORTER ROUTES**
- **NO PARKING PROBLEM**
- **LOWER TOTAL COST OF OWNERSHIP**



400.000 CARGO BIKES

- **> 50% OF GOODS**
- **400.000 CARGO BIKES**
- **1,5 MILLION TONS OF CO2 REDUCTION**
- **IN 10 YEARS/ 2025**

Potential to shift motorised trips related to goods transport to bicycles in European cities

25%

of all trips
in EU cities

42%

of all motorised trips
in EU cities

51%

of all motorised private and
commercial trips related to
goods transport in EU cities

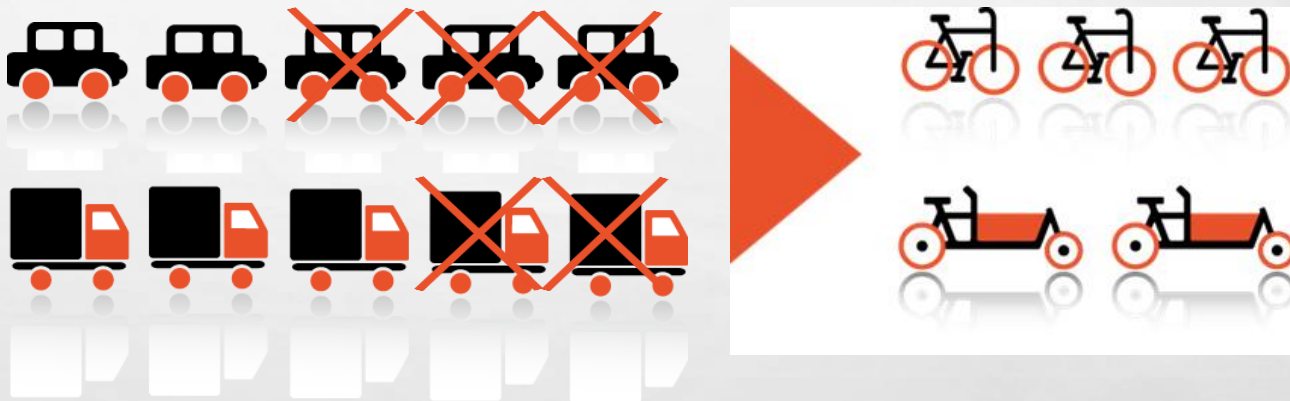
POTENTIAL IN THE AREA OF DELIVERIES



IN THE AREA OF DELIVERY, EVERY FORTH TRIP
ASSOCIATED WITH THE TRANSPORT OF GOODS
COULD BE SHIFTED FROM MOTORISED VEHICLES
TO CARGO BIKES

**25% OF ALL URBAN DELIVERIES COULD BE DONE
BY CARGO BIKE!**

BIG POTENTIAL



In European cities, every second motorised trip, associated with the transport of goods, could be shifted from cars or vans to bicycles, cargo bikes or cargo trikes

CONTAINERISATION

Containers: used for over 100 years



Use of containers in UK rail transport 1928



Containers in sea transport – start Sealand 1969



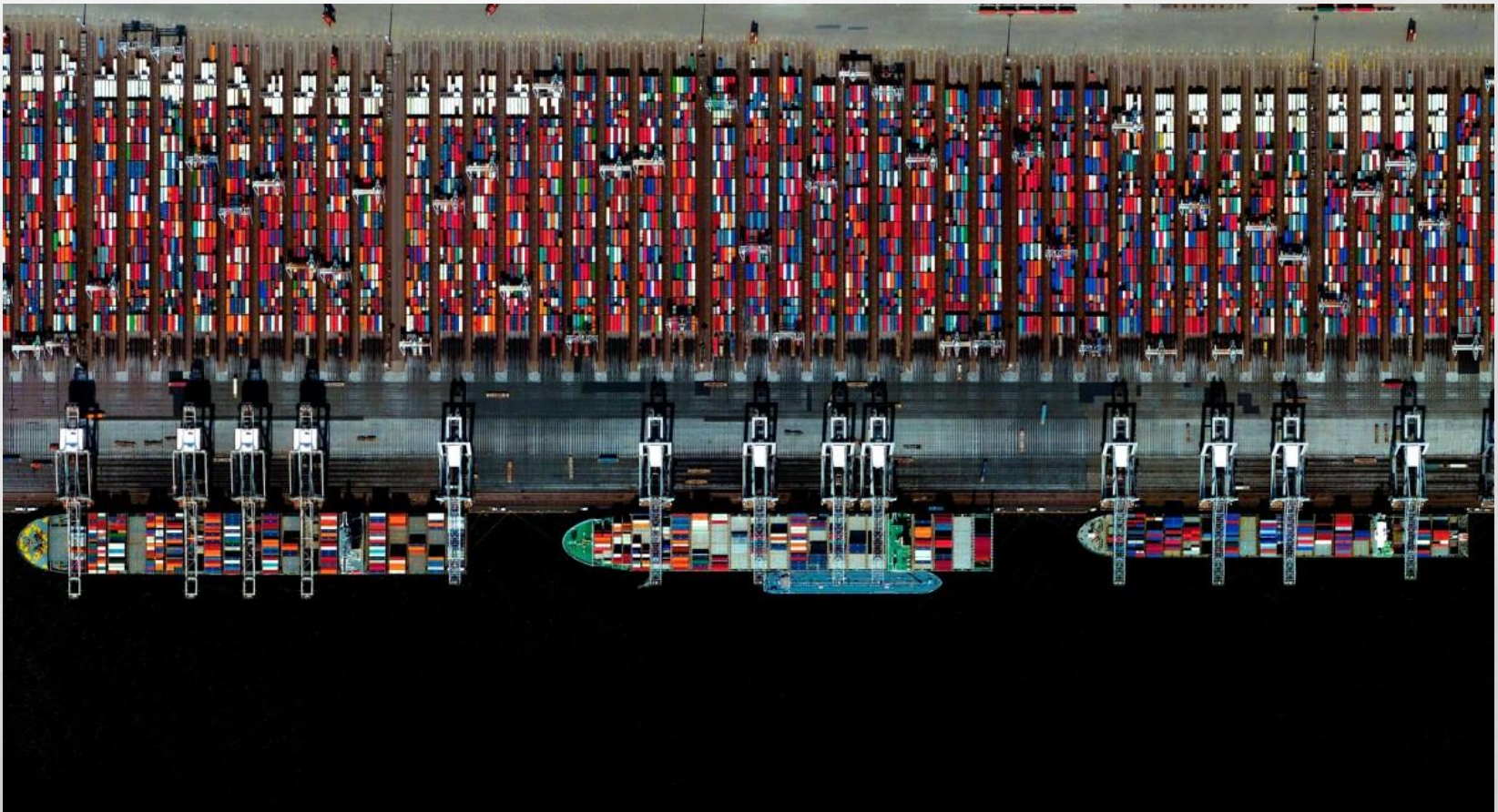
2015: 170 million TEU at sea, 20,000 TEU ships



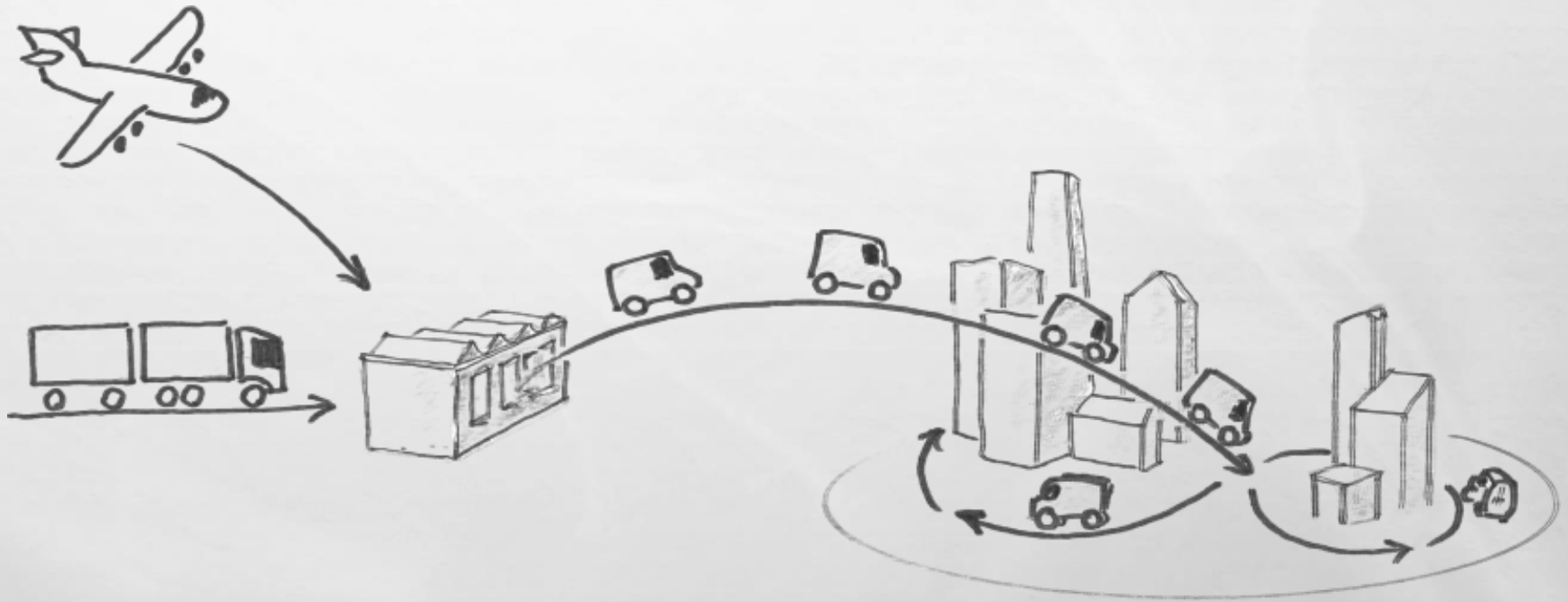
Air cargo containers (ULD) – standard for air cargo



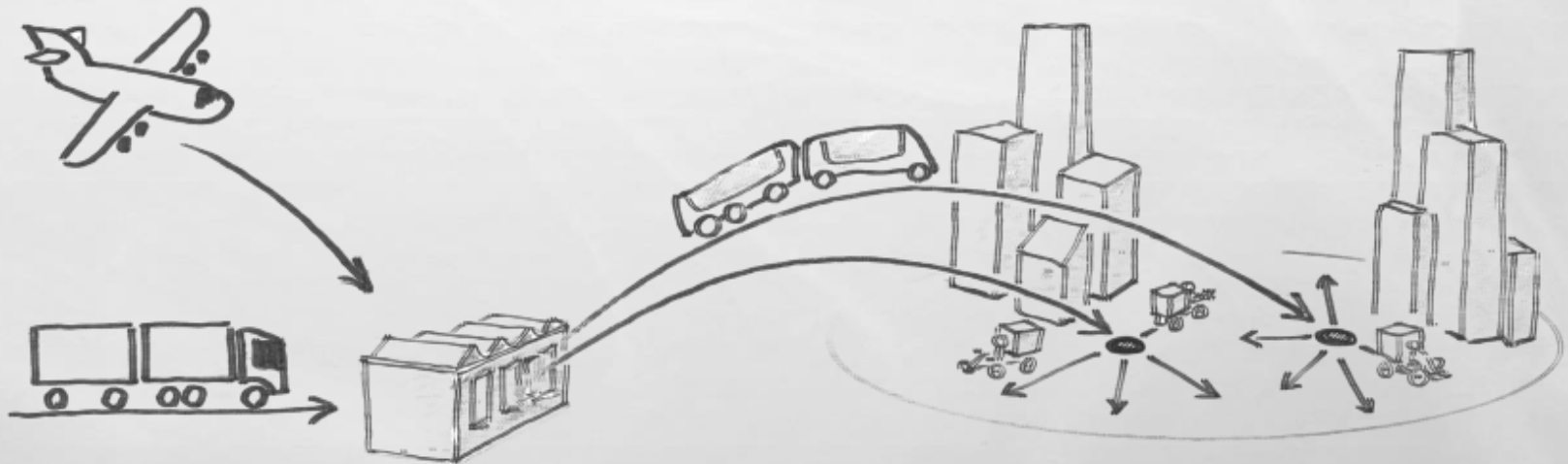
CONTAINERISATION



TODAY, VANS BOTH BRING THE GOODS INTO THE CITY AND DO THE LAST MILE DELIVERY



CONTAINERS ARE LOADED IN THE TERMINAL, BROUGHT INTO THE CITY WITH BIG VEHICLES, DROPPED OFF AT TERMINAL/HANDOVER POINTS WHERE LAST MILE DELIVERY VEHICLES PICK THEM UP FOR LAST MILE DELIVERY



CONTAINERISATION

ADVANTAGES

- **BETTER CONTROL**
- **TRANSSHIPMENT OF CONTAINERS INSTEAD OF GOODS**
- **EASIER, FASTER & CHEAPER**
- **MORE EFFICIENT**



CONTAINERISATION

DISADVANTAGES

- **NECESSARY INFRASTRUCTURE**
- **STORAGE OF EMPTY CONTAINERS**
- **RETURNING CONTAINERS TO THE START OF THE SUPPLY CHAIN**



**2018
IN 20 CITIES**



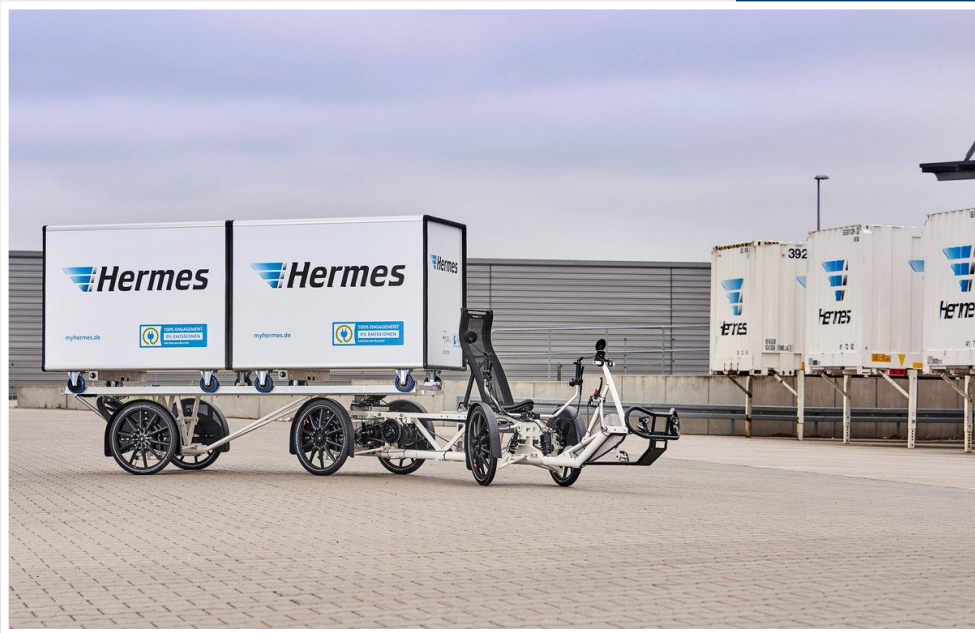
**VELOVE ARMADILLO
DHL EXPRESS – VELOVE – FLEVOBIKE**



HYDROGEN ARMADILLO



HERMES KOMODO-PROJECT PRENZLAUER BERG BERLIN

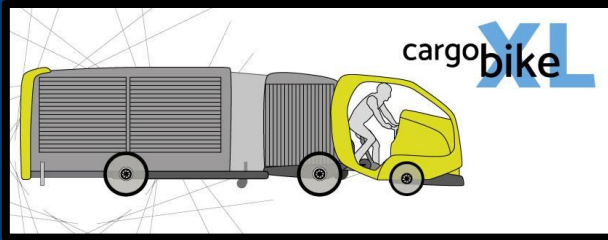


FOODLOGICA





COOL DELIVERY

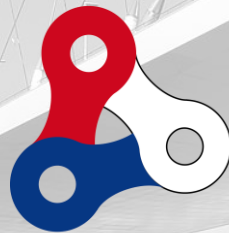


CARGOBIKEXL HET LOKAAL



- **LOCAL FOOD & DAIRY PRODUCTS**
- **5 M3 , 500 KG**
- **WINNER INNOVATION CHALLENGE SMART & HEALTHY CITY 2015**

TAKE THE CHALLENGE!



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Border Sessions Festival, MakeCityLab, 13 June, 2018