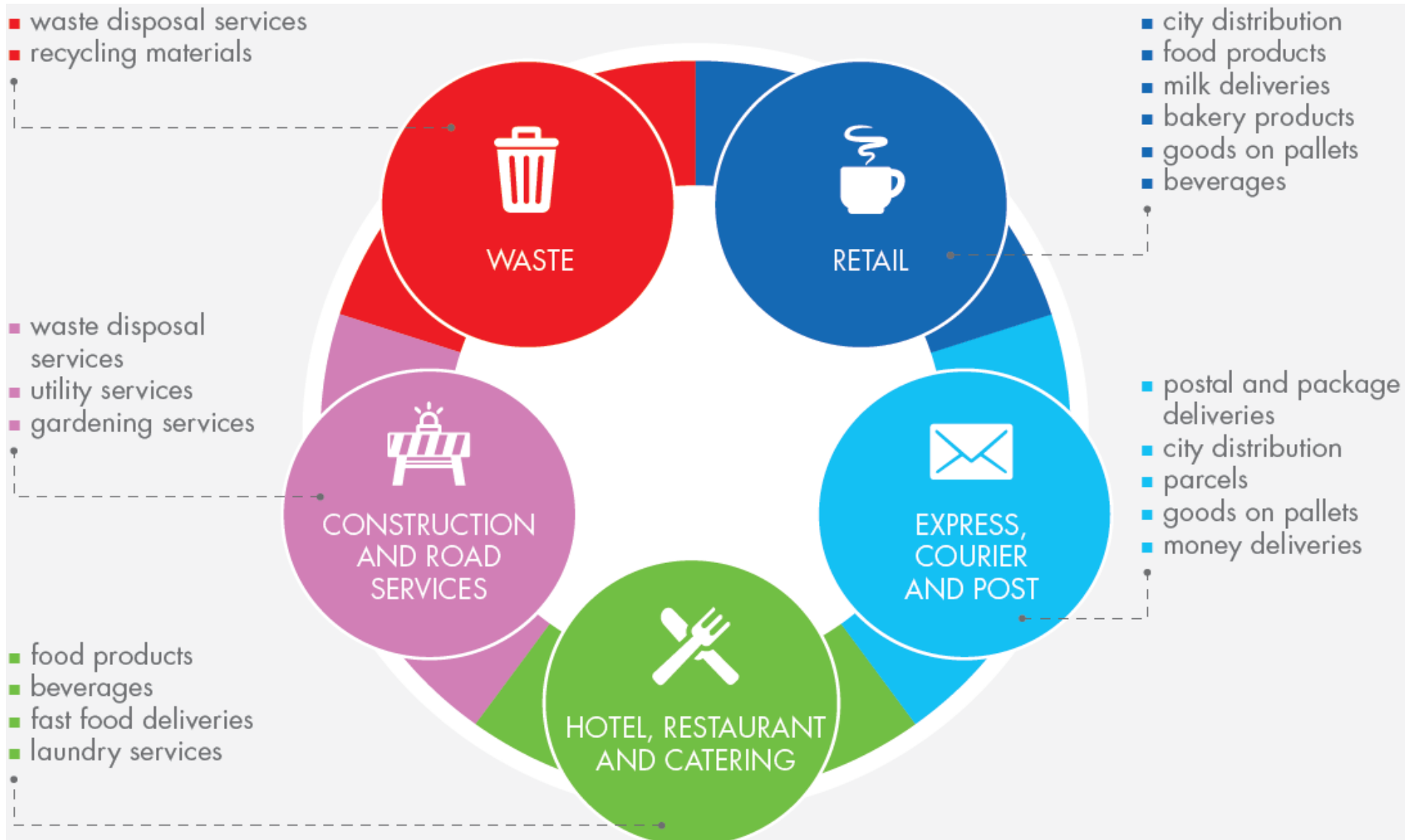


Trends in travel demand: Last-mile logistics

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Identifying logistics activity



Reasons for intensity in last-mile activity

Retail trends:

- Online shopping is averaging between 10-12% sales growth/yr
- 42% of 18–24 year-olds use internet as primary purchasing medium
- 46% of houses and 31% of flats receive 5 or more deliveries/collections/service visits per week (TfL, 2014)
- Next-day delivery (non-food) grew by 50% (2012-2015)
- Same-day delivery = 10% of the total parcels market by value
- 13-14% of all e-commerce deliveries in the UK arrive either late or when the customer is not at home (IMRG, 2014a) costing £771m in 2014

Reasons for intensity in last-mile activity

Logistics trends:

- Multi-tenanted buildings, all with separate procurement processes generate considerable freight activity
- There is approximately 20% annual spare capacity in the parcel market (Royal Mail)
- Carriers: 120 transactions/round; 35 stopping points; @6.2km driving; 'hoteling' & walking for 77% of round (6 hours)
- Increase in 'life-style' couriers (Uber Rush, Amazon Flex)
- Virtual restaurateurs generating small vehicle movements
- Understanding how vehicles actually navigate urban spaces ... the consignee's address V the vehicle stopping point

Reasons for intensity in last-mile activity

Logistics trends:

- 30% loss in the proportion of network capacity for private motorised trips relative to 1996 in central London
- Kerbside space being taken over by walking, cycling, PT infrastructure
- Warehousing floor-space fell by 82% in London City between 1998-2008 – longer stem mileages
- High street retailers now have a ratio of 80:20 retail floor space to backroom stock space where it used to be 60:40 leading to more deliveries

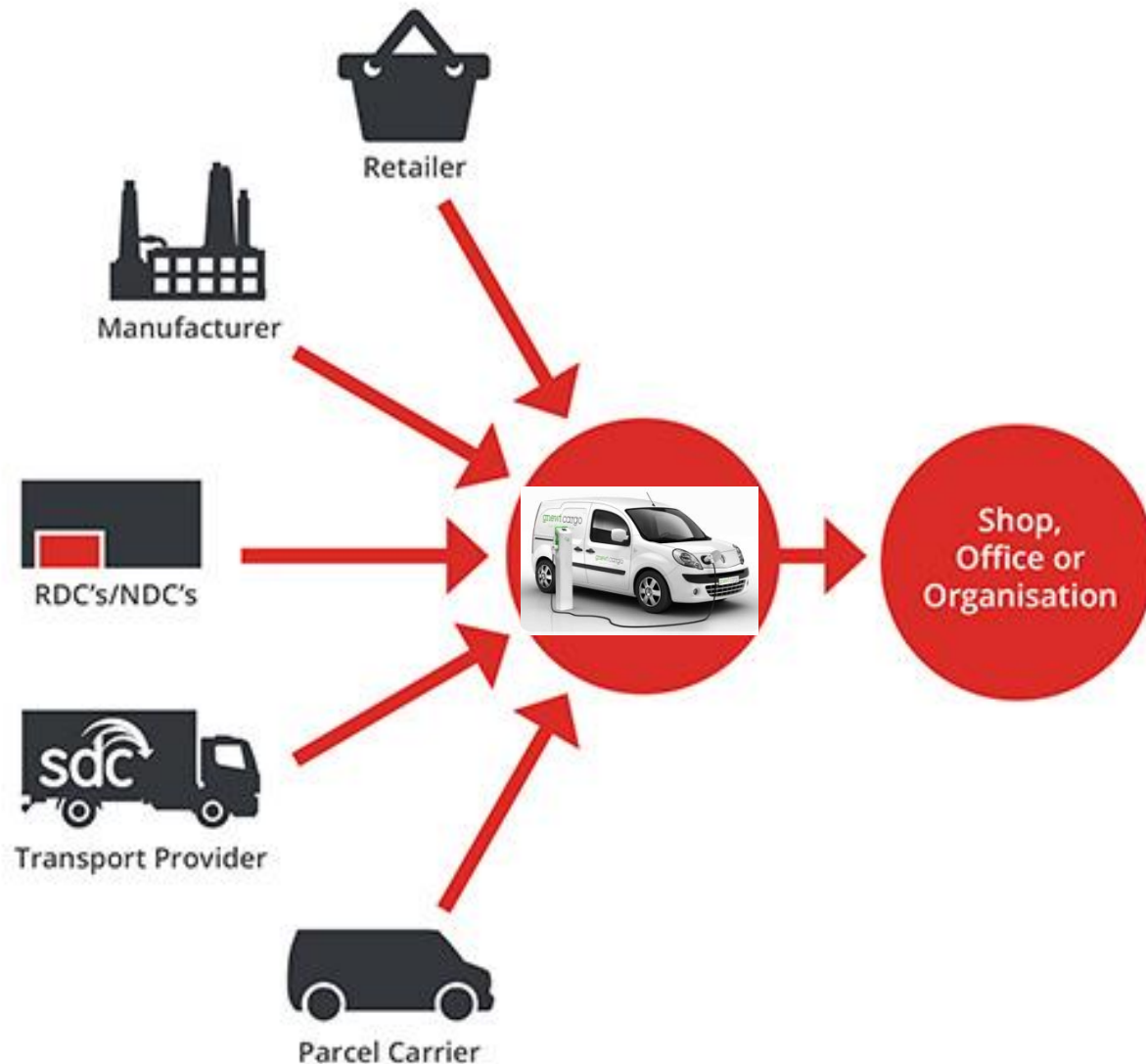
Last-mile activity

Mitigating negative impacts:

- Delivery charges should be put in place that reflect the internal (and external) costs of last-mile vehicle operations
- Joint procurement of services by businesses across a street & banning personal deliveries to work
- Implement Local Authority 'Landlord' and business 'tenant' relationships as in managed shopping centres
- Retiming of freight activities enforced by access charging & incentives
- Developing micro-consolidation hubs (French ELP system)
- Carriers-carrier model & 4PL 'barrow boys' with FTC
- New modes (air & pavement drones)

Solutions to aid the last-mile

Consolidation: The Carrier's Carrier



Localised Micro-consolidation hubs

‘Espace de livraison de proximité’ - Bordeaux



<http://emmanuel.rubod.free.fr/wordpress/wp-content/pict0005.JPG>

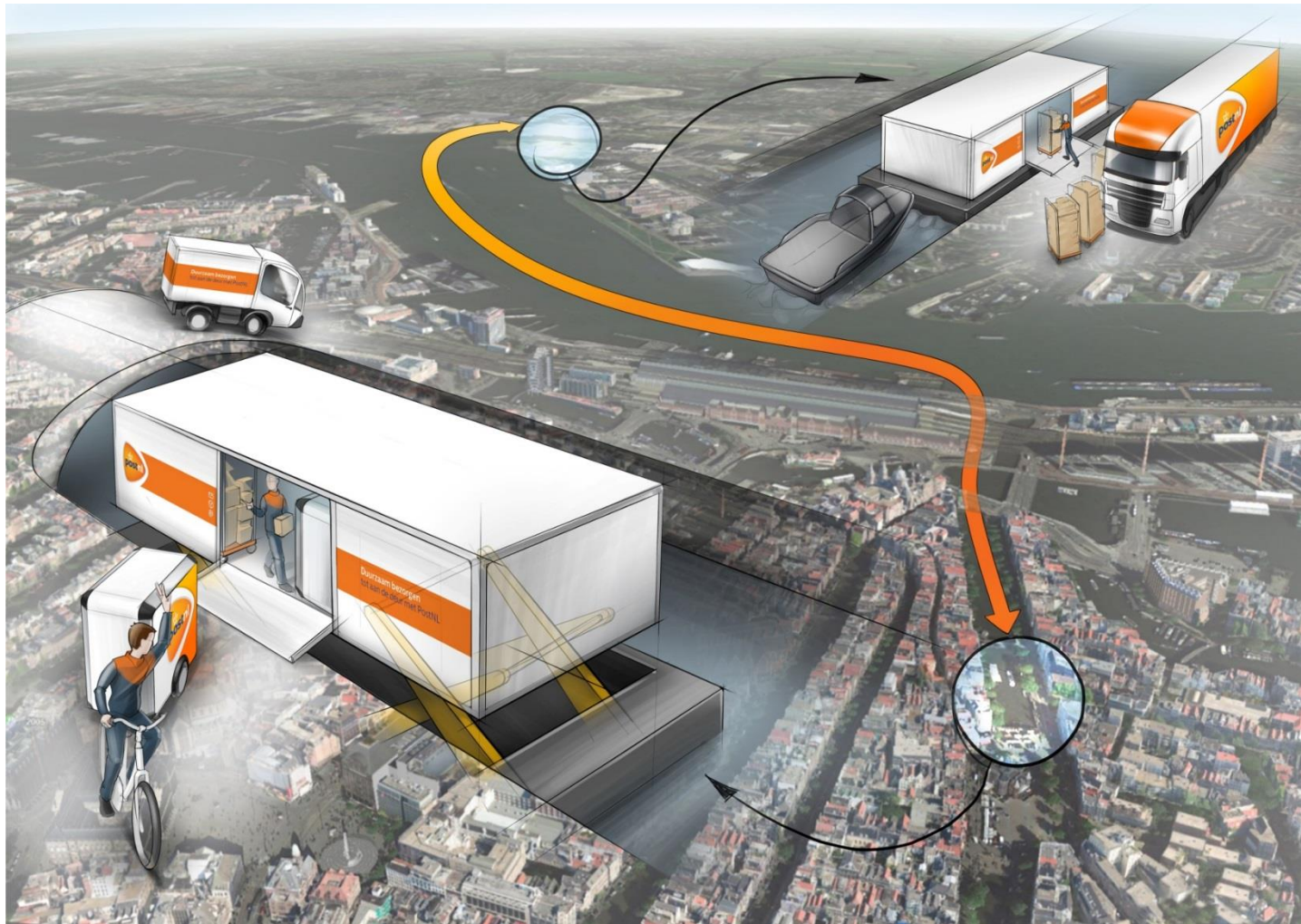
Bookable loading bays



Mobile depots



Amsterdam: Floating Depot Trial



PostNL Challenge: Zero emissions in the Dutch city-centres by 2017

Click and collect



Unattended Reception



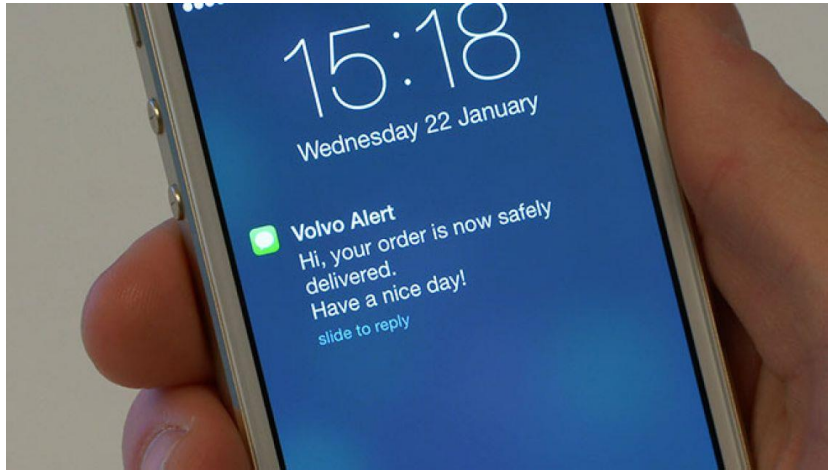
Attended Collection Point Systems



Local Collect



Goods-to-person

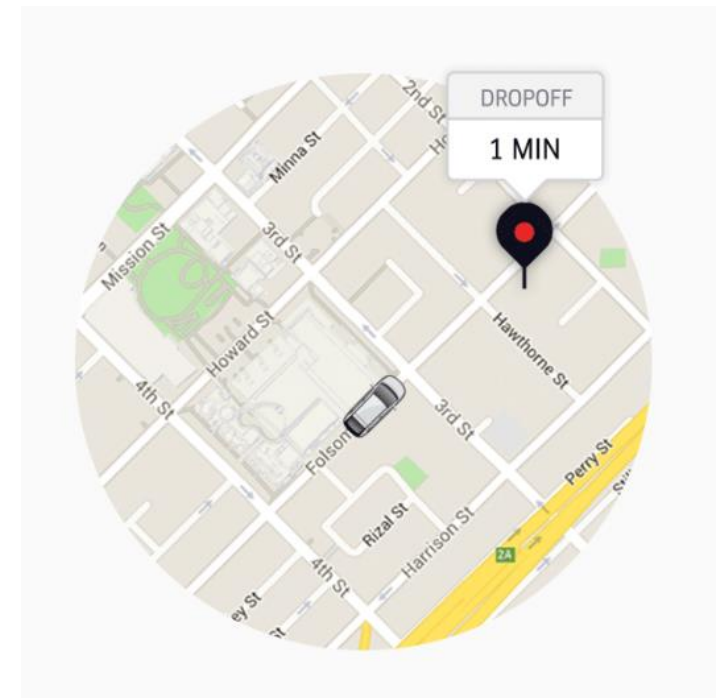
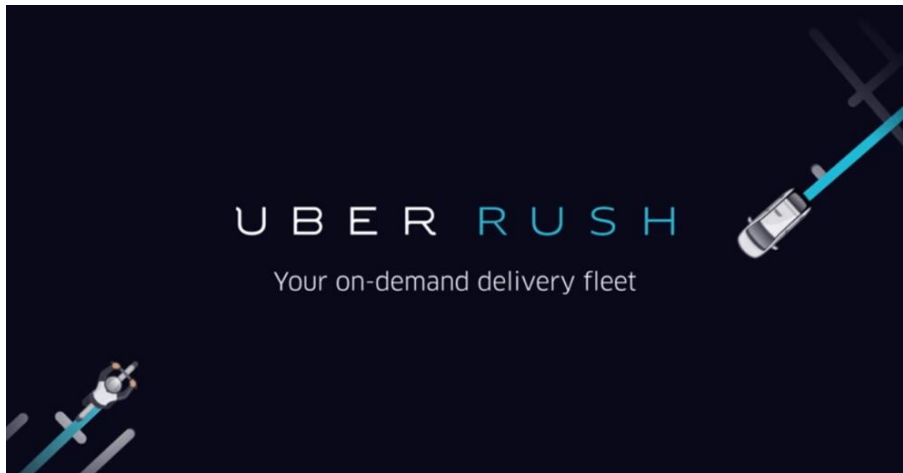


- Car drops (<http://www.cardrops.com/>)
- Volvo On Call – Roam Delivery
- Audi-DHL-Amazon
- Jaguar Land Rover 'In-Motion'



Goods-to-person

- Uber Rush
 - Any product delivered in under 1 hour
 - Connects customers with local couriers



Last-mile food delivery



Goods to person (last-mile food)



http://ichef-1.bbci.co.uk/news/1024/cpsprodpb/96A7/production/_92376583_mediaitem92376582.jpg

Goods to person (Mablethorpe)



https://www.google.co.uk/search?q=drone+ice+cream+delivery&rls=com.microsoft:en-GB:IE-Address&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiCjPyM2LrUAhUEKIAKHeoNAbYQ_AUICygC&biw=1366&bih=577#imgrc=027GO0wdOF9gFM:&spf=1497352335272

Goods-to-person: The Future?



Goods-to-person: The Future?



<http://www.dpdhl.com/de/presse/specials/paketkopter.html>

Goods-to-person: The Future?



http://static3.businessinsider.com/image/545904426bb3f7141c6ccb3f-1200-800/am1_0985.jpg

Goods-to-person: The Future!

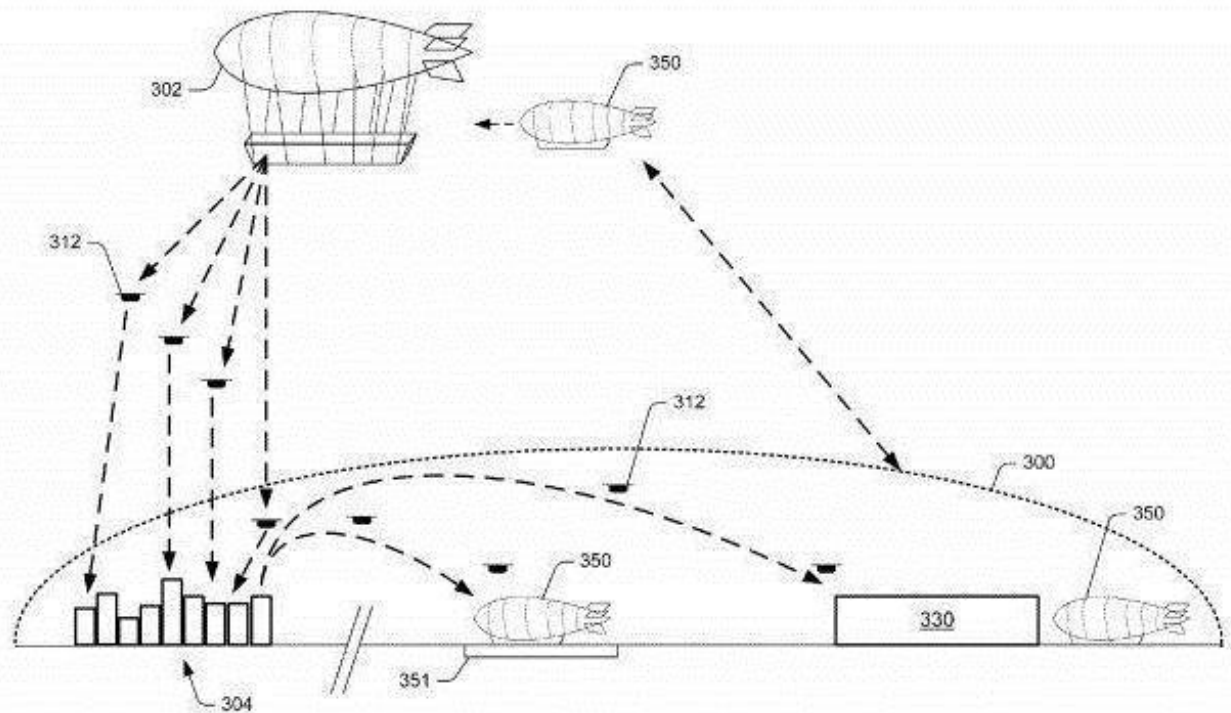


<https://textually.org/drones/2015/05/22/drones.jpg>

Airborne fulfilment centres



<http://www.bbc.co.uk/news/technology-38458867>



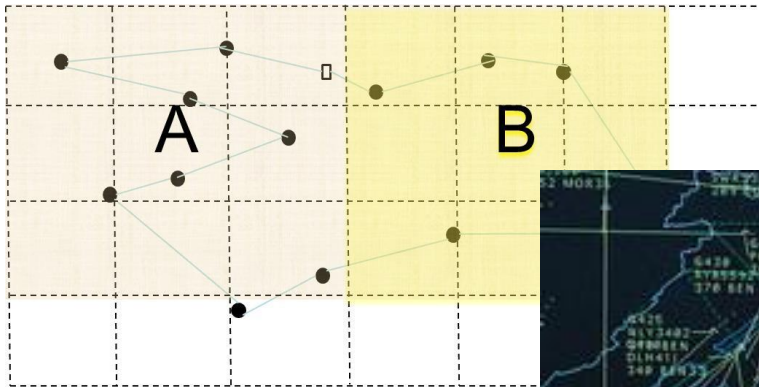
http://www.the-dialogue.com/wp-content/uploads/2016/04/en26-city-of-the-future_03.jpg

Goods-to-person: The Future?



- <http://www.bbc.co.uk/news/magazine-26372277>

The scope for a FTC?



Thankyou

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