Planning processes in high-density development projects: how does freight fit in? Case studies from Gothenburg and Paris

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Sönke Behrends, Chalmers University of Technology, Gothenburg, Sweden, Urban Freight Platform

Laetitia Dablanc, University of Gothenburg, Sweden, University of Paris-East, France, MetroFreight/VREF center

Relevance of freight for urban planning

- All buildings in cities generate freight activities (pick-up and/or delivery)
- Any new development adds to a city's urban freight activities
- Urban freight requires its own places and buildings
    - Loading/unloading
    - Terminals
    - Warehouses

- However, freight is largely disregarded from planning processes, especially in high-density urban areas

→ inefficient freight operations and environmental/social impacts

What are the challenges to the integration of freight into the planning process in high-density areas?

Methodology – Case study

Two cases of high-density urban development projects

- Gothenburg – beginning of process
- Paris – end of process

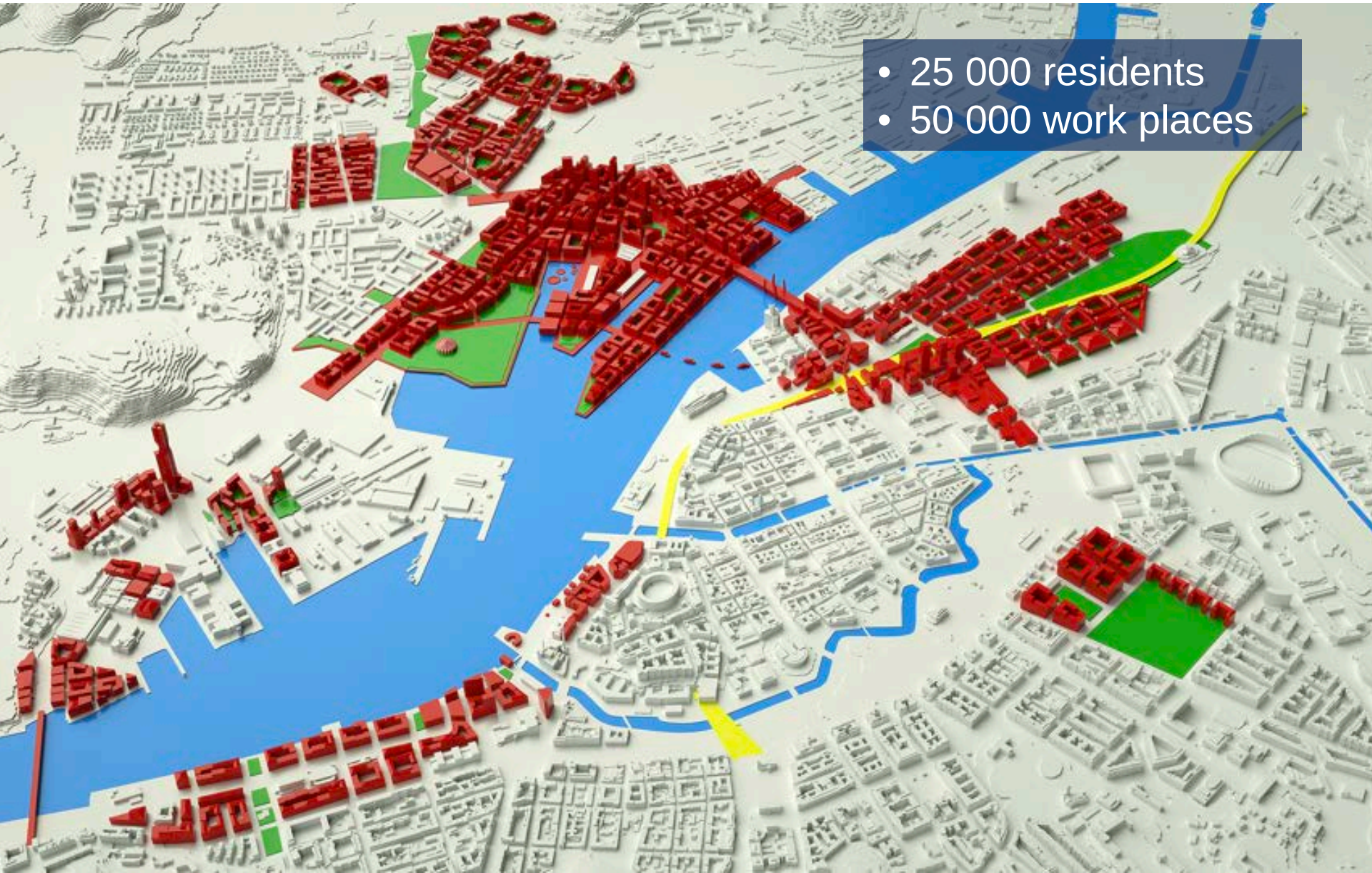
Data collection

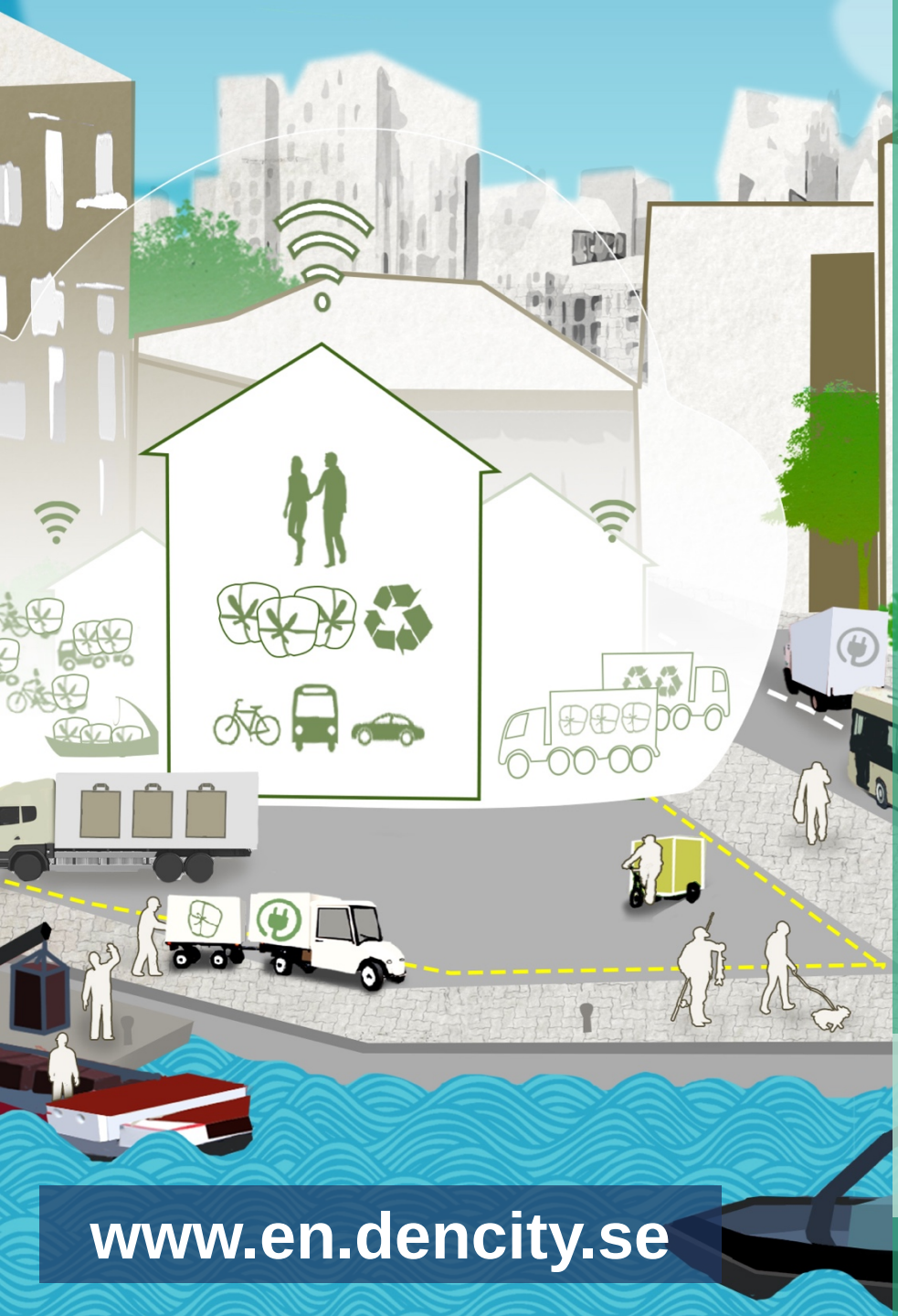
- observations from direct participation in planning processes
- complementary interviews with planning staff

Gothenburg


Volvo
Light industry & brownfield
Former free port
Rail Terminal
historical city center
The port

Gothenburg city center 2035





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innovative solutions for sustainable passenger and freight mobility in dense neighborhoods, with high standards of attractiveness, accessibility and sustainability.

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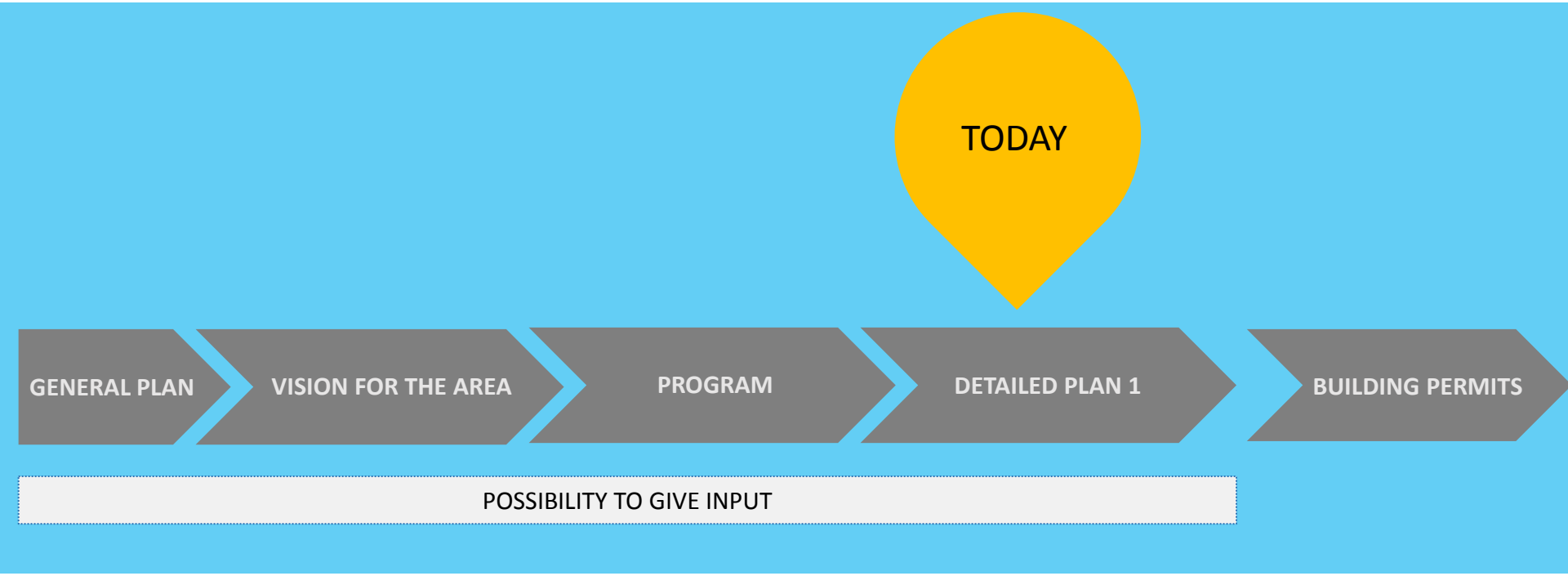
www.en.dencity.se

The *Free Port* development area

- high density, with high standards of attractiveness, accessibility and sustainability
- Urban form as enabler for innovative urban logistics
  - electric distribution
  - urban waterways
  - etc.
- Awareness for freight – but limited know-how

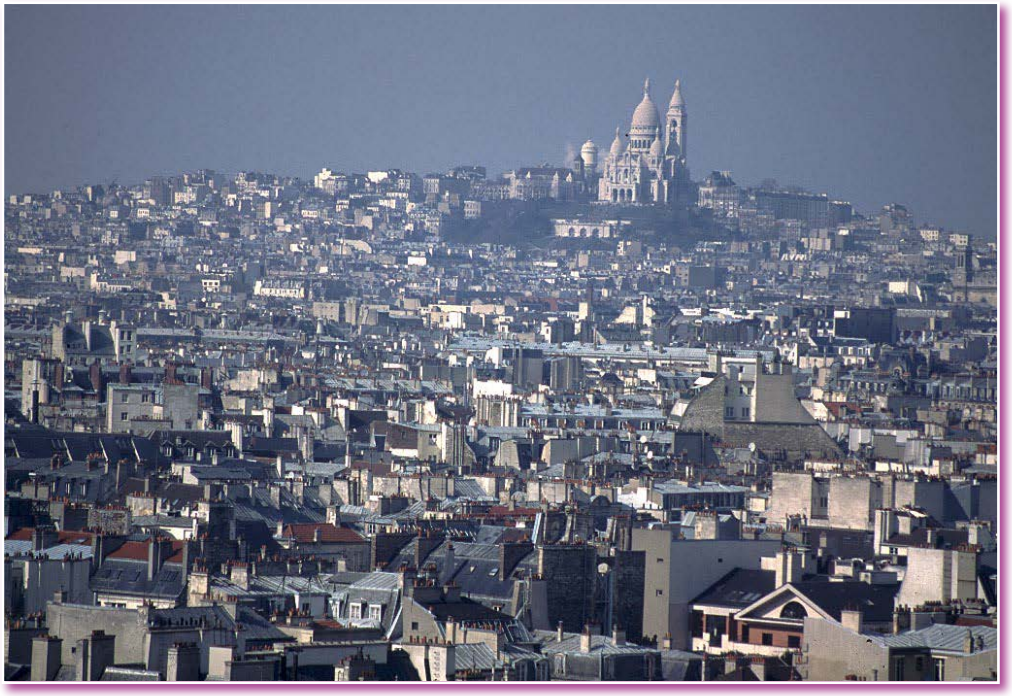


Integrating freight into urban planning: Lessons learnt so far…

Gothenburg

- Complexity – many actors need to be involved
- Lack of common language – industry/planners/academia
- Time intensive – start early and plan for many meetings
- lack of freight data delays decisions

Paris

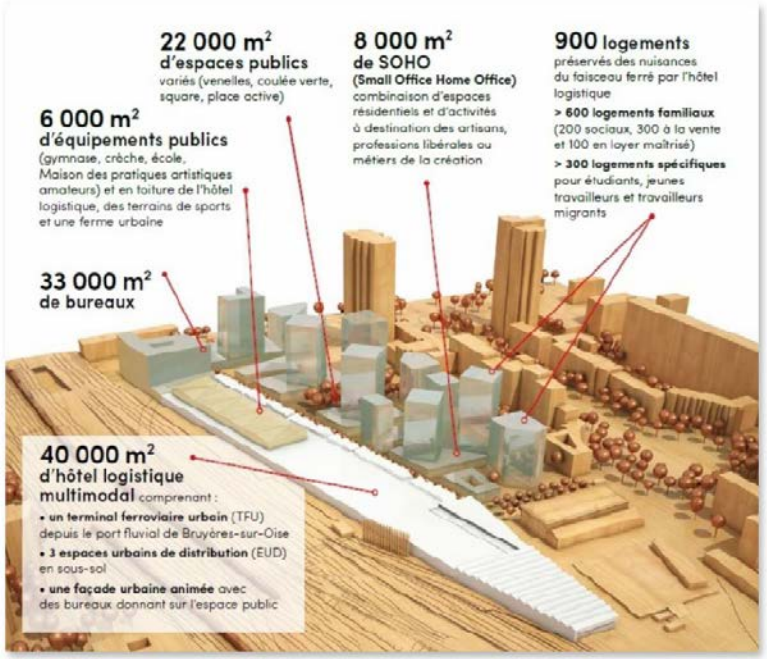


Paris ‘logistics hotels’

- Multi-story
- Multi use: logistics, retail, residential, offices
- Innovative architecture, often on former industrial/rail areas, former parking buildings

Chapelle International: a large logistics hotel within a large urban development project

- A 45,000 m2 logistics hotel
  - o Urban farm and sport facilities
  - o Offices and data center
  - o Urban freight rail terminal
  - o Urban distribution terminal
- Adjacent to a 100,000 m2 urban project
  - o 900 housing units
  - o 40,000 m2 offices
  - o 22,000 m2 public spaces
  - o 6,000 m2 public facilities (schoo



Vue d'ensemble de la programmation générale du site de Chapelle. Source : Espaces Ferroviaires.

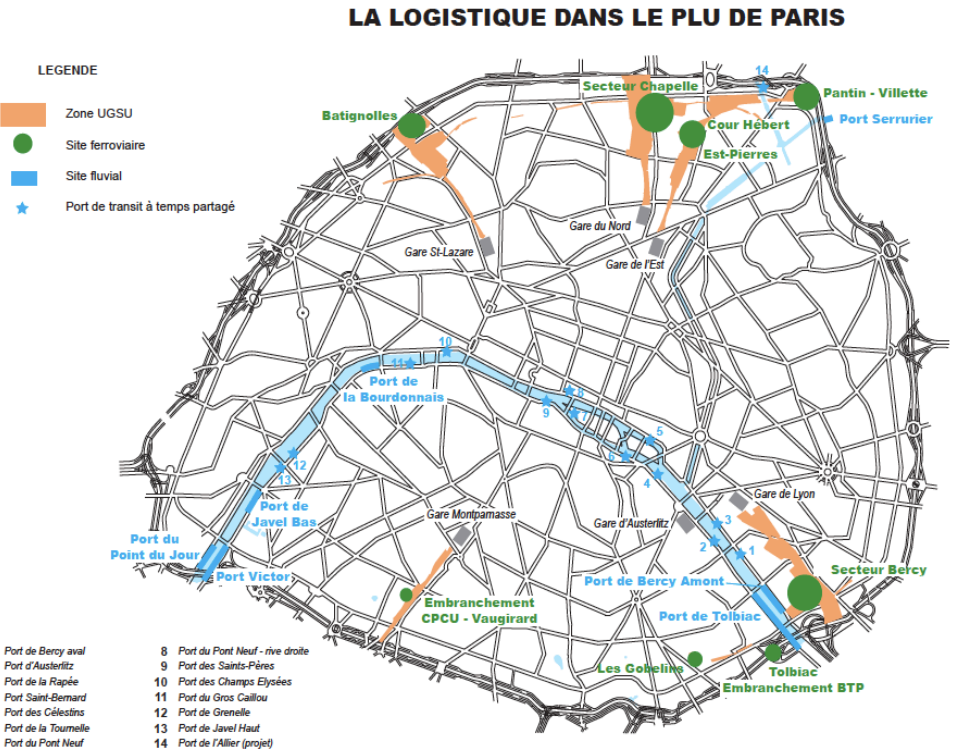
A very long process

2006: New Paris Land Use Plan with land parcels reserved for logistics
2010: SNCF launches a **request for proposals** for a logistics project
- with rail freight operations (imposed)
- not above 7 metres from street level (imposed)

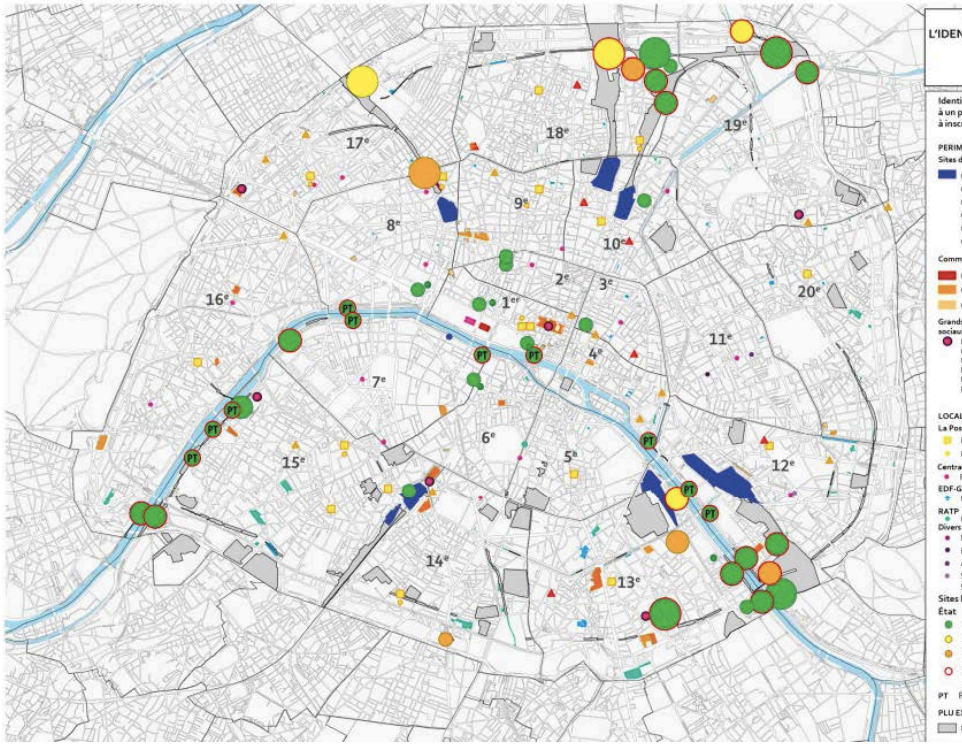
2011: Sogaris project selected
2012 + 19 months: **building permit**
2013: **Special agreement** for large industrial buildings
2014 Nov-Dec: **Impact Study** and public enquiry
2014: **ICPE permit** (hazardous activities)
2014: **Specific Notice for Rail Safety permit**
2015 Sept: ownership of the site to Sogaris and start of works
2015 Dec: agreement signed with rail operator and logistics provider
2016 Jan: end of excavation works; agreement signed with wholesaler
2016: '**Modifying Building Permit**' solicited and granted
2017 June: building delivered
2017 Sept-Dec Train tests, logistics incubator settles in, first train service from Dourges
2018 Jan: wholesaler settles in

Logistics land uses in Paris zoning laws

2006



2016



Lessons learnt

- **Logistics land uses** need to be accepted/protected/promoted
- **Mixed-uses** must be accommodated
- Accelerate process, streamline **safety requirements**
- Give up rail requirement – need to be optional
- **Continuous adaptation** of building design and architecture, because of changing needs from potential clients over the time of the project

Conclusions and open questions

Joint lessons learnt from Paris and Gothenburg

- Long process
- Lack of understanding between freight experts and urban planners, but it is getting better
- Constantly changing industry, markets: difficult to forecast freight volumes and characteristics, need for “permanent flexibility” in a freight planning process

Open questions

- Major events (Gothenburg 400 years, Paris Olympics): will accelerate processes, will put pressure on planning authorities to deal with freight
- Academia needs to do more to provide city planners with modeling tools, guidelines and knowledge

Resources

- www.urban-mobility-solutions.eu
- http://www.citylab-project.eu/
- www.metrans.org/metrofreight
- VREF report: http://www.vref.se/download/18.1ffaa2af156b50867485a23/1471930170757/Why-Goods-Movement-Matters-SPA+-+June+2016.pdf
- On Demand 'Instant Deliveries' in Europe – Supply Chain Forum, 2017
- Observatory of strategic developments impacting urban logistics. Deliverable D2-1, CITYLAB project, European Commission (www.citylab-project.eu/deliverables.php)

Sönke Behrends

Chalmers University of Technology

E-mail: sonke.behrends@chalmers.se
Twitter: @Goteborger

Laetitita Dablanc

University of Gothenburg

E-mail: laetitia.dablanc@ifsttar.fr

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