

CITYLAB PARIS



The CITYLAB implementation in Paris accompanied the development the Beaugrenelle urban distribution space and the Chapelle International logistics hotel with the aim to enable cleaner delivery at the last mile, working with various stakeholder including the operators, real estate developers and the public authorities.



Context

The Paris CITYLAB implementation action aims to address the negative consequences of “logistics sprawl” in order to reintroduce logistics terminals in the dense urban areas. Warehouse location has a direct impact on distance of goods transport in urban areas. By moving warehouses outside cities, the kilometres travelled for delivery increase. The expansion of e-commerce put further pressure on the volume and frequencies of parcel deliveries in dense urban areas.

Every day, around 893,000 deliveries happen in the Paris region; about 57% with vans. Vans and trucks are responsible for 16% of travelled distance. In contrast, logistics related trips (LRTs) originating or serving the interurban and the diffused urban areas are almost negligible, around amount for 7.6% of total regional freight flows.

The implementation of Paris CITYLAB assessed the (environmental, social, economic and regulative) impacts of two urban warehouses, called “logistics hotels” at different stages of implementation with different partnership structures and functions: Beaugrenelle Urban Distribution Space at operating phase; Chapelle International Logistics Hotel at construction phase. It provided a framework and guidelines to assess costs and benefits of (re)introducing logistics terminals in dense urban areas while assessing regulatory, technical and economic challenges when constructing logistics buildings in cities.

In action

Logistics hotels are new ideas in Europe (originating in Asian cities like Tokyo, Seoul and Hong Kong). They are logistics facilities implemented in urban



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areas and have specific characteristics such as mixed uses and/or several stories. Some of them are multimodal. The “logistics hotel” is an element of the City of Paris’ strategy to reintroduce logistics activity in the dense urban area.

The Beaugrenelle urban distribution space is configured as an urban distribution centre to serve final parcel distribution in the South-West Paris and immediate neighbour cities. Chronopost currently uses a fleet of 50 light goods vehicles. Intending to use cleaner delivery, it experimented with about 10 electric vans, but concluded that they did not fit the needs. It is hoped that the urban location of Beaugrenelle increases the flexibility and quality of service, while reducing overall CO₂ emissions of Chronopost operations. Chapelle International logistics hotel has just been finished. It accommodates rail freight operations as well as road operations. The ambition is to substitute diesel vans by electric vans for final deliveries.

Results

The Living Lab approach has made the realisation of the concept of Logistics Hotels possible. The Living Lab gathered different stakeholders – public authorities, urban logistics real estate developers and logistics. The concept has been developed together by the stakeholders. As a result, the solutions could be turned into a favourable regulatory and economic environment.

For Beaugrenelle, there have been regular site visits and discussions with different stakeholders to assess the potentials. It revealed that a mixed fleet with electric vehicles was infeasible, due to the high costs and technical complexity of electric fleet operation. Instead, it was decided to switch to natural gas vehicles. Nevertheless, the consolidation effect of an urban location led to a reduction of emissions (CO₂, PM and NO_x), despite the low electric vehicle penetration.

Urban land use is highly regulated in Paris. Despite public policies aiming at reducing emissions and promoting clean transport methods, building logistics facilities remains difficult. Particularly challenging are the frequent truck and van movements in a very dense environment. Thus, progress in such complex projects depends on involving multiple stakeholders to influence the regulatory and administrative framework.

The assessment of Beaugrenelle shows that a middle size logistics hotel in operation provides valuable inputs for operators and cities willing to promote urban freight terminals to deal with “logistics sprawl” and its negative effects.

For City of Paris, the Chapelle International project is a show case of urban innovation in sustainable

development promoting social inclusion and diversity.

Challenges, opportunities and transferability

This was the first assessment of the regulatory, technical and economic challenges when building a major logistics terminal in an urban area.

It revealed several issues that may impact the operation of the mixed function facilities: the regulatory and technical complexity, the economic viability of the business model and the engagement of stakeholders. Strong political coordination is essential to implement innovation.

The fact that these projects are developed by Sogaris, a semi-public institution mainly owned by Paris Municipality and Ile-de-France authorities, shows the support of local government. This is particularly important for Chapelle International as an innovative concept of which the level of uncertainties and thus risks are high. The support of local government has played an important role in securing funding and partnership building.

The Chapelle assessment study has demonstrated that discussions between stakeholders could help mitigate obstacles and go ahead with construction, dodging obstacles step by step. Energy and willingness from main stakeholders was key to mitigating barriers. In both cases, the Living Lab approach which facilitates the cooperative process proved to be a method to implement an innovative project. It allows partners to adjust the concept according to the real situations and needs and thus to reduce the long term risks.

Recommendations will be provided for cities, operators and real estate investors interested in logistics hotels, as part of medium to long term urban planning. Partly following the CITYLAB report, the Paris zoning ordinance of 2016 (Plan local d’urbanisme) has incorporated lessons from Chapelle and Beaugrenelle implementations, and opened more land to future logistics hotels.

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