## **Ifsttar Research Paper**

## Feasibility of consolidated freight deliveries: Urban logistics experiments in the City of Paris, Paris as an urban logistics laboratory

Adeline Heitz - PhD Student

IFSTTAR-SPLOTT – University of Paris East - 77447 Marne-la-Vallée - France

Research Objective: Last mile deliveries pose great challenges on urban distribution networks. Many new solutions in terms of depots and inner city distribution alternatives such as outer-city consolidation centers and intermodal combinations have been multiplying due to the aforementioned strain on urban logistics. Numerous experiments towards more environmentally friendly urban transport solutions have been attempted over the last years. However, as there seems to be no lack of innovative ideas but rather of sustainable business models, most of the developed projects have failed to make it beyond the trial stage. So, the question of generalization of these solutions to the rest of the metropolitan area as a real public policy remains.

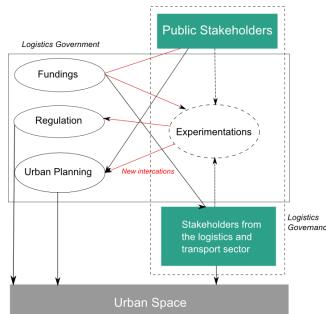
**Problem Statement**: By analyzing past experiences, reasons for success and failure can be identified. This leads to an overview of critical topics that have to be kept in mind when designing a planning of logistics activities in the City. The purpose of this study is to highlight the innovations in the management practices of public and private actors regarding the development of consolidated freight terminals for deliveries in Paris. Planning freight and logistics activities in the Paris City center requires experiences and skills that public and private actors have to develop. Both are in a building process and learn to coordinate their actions in order to develop freight terminals and logistics activities in the dense city center. This learning process contributes to the co-construction of the development and planning of logistics activities in the urban area.

Research Methodology: There is a multitude of different stakeholders whose interests and goals often diverge involved in the development of logistics activities and freight terminals. City councils, retailers, carriers and local citizens are only a few of them. Nevertheless, it has become important and urgent that the different stakeholders cooperate in order to create an efficient system with a good overall outcome. Urban logistics which now results in experiments of "logistics solutions" in the city, actually underlines the novelty of certain experiences of public and private actors in the modes of production of the city. These experiments reflect new practices in terms of planning and urban development. City logistics becomes a laboratory, in which public and private actors are experimenting with new ways of designing urban development. Based on four case studies of experimental urban logistics in Paris, we have analyzed the stakeholders involved in each experimentation: the UCC Beaugrenelle, (Paris 15<sup>th</sup> arrondissement), the UCC Montorgueil (Paris 2<sup>nd</sup> arrondissement), The Green Link company (Paris 10<sup>th</sup> arrondissement) and Vert Chez Vous Company (Pantin and Paris). We followed these

experiments in the year 2014 - 2015; at least two visits and one interview were conducted in each of these experiments. At the end of the year we counted 13 interviews, 15 hours of interviews, 9 different interviewed stakeholders.

Main Results: The main result is that urban logistics solutions lead to a collective construction around the urban project. Public and private stakeholders need to cooperate in order to develop these experimentations, through regulation, funding or urban planning. This cooperation leads to a renewal of governance of the urban project and the way of production logistics spaces in the city center. We observed a phenomenon of proliferation of actors involved in the project. "This "pluralization" implies a new urban project management. As part of the four experiments that we analyzed we noticed the large number of actors involved and their diversity which complicates the exercise of coordinating these actors. New stakeholders are involved alongside the traditional players. In logistics urban project, this includes shippers and carriers, or logisticians, which provide the studies and the implementation of the project. Consequently these projects become an "urban civil society forum." Yet these actors are little represented and little involved in the governance of these urban projects, which is a singularity from the model defined by the urban project. Also, some of the stakeholders lose their weight within the city while others win. At this re-composition of the relationships between the actors, we must add a transformation of the role of political actors around the "Direction" that supports the City of Paris, which becomes part and organizer of the new governance.

Urban logistics solutions developed into the City of Paris constitute a new way to develop cities in a sustainable way in a bottom-up approach, because discussions and governance with all the different stakeholders come before the realization of the project. So, the development of logistics



activities in the city is not only a good way to develop greener solutions for freight but is also a good way to improve relationships between all the urban stakeholders and test some new mode of coordination for urban development. The implementations of logistics solutions or consolidated freight terminals in Paris are still experimentations. The complex governance of these projects let us believe that for now the generalization of the consolidated freight terminals to the entire metropolitan area through urban planning policies is not possible, and remains a case-by-case urban project tool.

## Acknowledgement

This research was funded and supported by the Volvo Research and Educational Foundations through the MetroFreight Center of Excellence. The author would also like to thank Laetitia Dablanc (PhD supervisor).