

## Bundling of Transport Flows: Adoption Barriers and Opportunities

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**Abstract :** In the past years, bundling of transport flows, whether or not implemented in an intermodal process, has popped up as a promising concept in the logistics sector. Bundling of transport flows is a process where two or more shippers decide to synergize their shipped goods over a common transport lane. Promoted by the European Commission, several programs have been set up and have shown their benefits. Bundling promises both shippers and logistics service providers economic, societal and ecological benefits. By bundling transport flows and thus reducing truck (or other carrier) capacity, the problems of driver shortage, increased fuel prices, mileage charges and restricted hours of service on the road are solved. In theory, the advantages of bundled transport exceed the drawbacks, however, in practice adoption among shippers remains low. In fact, bundling is mentioned as a disruptive process in the rather traditional logistics sector. In this context, a Belgian company asked iMinds Living Labs to set up a Living Lab research project with the goal to investigate how the uptake of bundling transport flows can be accelerated and to check whether an online data sharing platform can overcome the adoption barriers. The Living Lab research was conducted in 2016 and combined quantitative and qualitative end-user and market research. Concretely, extensive desk research was conducted and combined with insights from expert interviews with four consultants active in the Belgian logistics sector and in-depth interviews with logistics professionals working for shippers (N=10) and LSP's (N=3). In the article, we present findings which show that there are several factors slowing down the uptake of bundling transport flows. Shippers are hesitant to change how they currently work and they are hesitant to work together with other shippers. Moreover, several practical challenges impede shippers to work together. We also present some opportunities that can accelerate the adoption of bundling of transport flows. First, it seems that there is not enough support coming from governmental and commercial organizations. Secondly, there is the chicken and the egg problem: too few interested parties will lead to no or very few matching lanes. Shippers are therefore reluctant to partake in these projects because the benefits have not yet been proven. Thirdly, the incentive is not big enough for shippers. Road transport organized by the shipper individually is still seen as the easiest and cheapest solution. A solution for the abovementioned challenges might be found in the online data sharing platform of the Belgian company. The added value of this platform is showing shippers possible matching lanes, without the shippers having to invest time in negotiating and networking with other shippers and running the risk of not finding a match. The interviewed shippers and experts indicated that the online data sharing platform is a very promising concept which could accelerate the uptake of bundling of transport flows.

**Keywords :** adoption barriers, bundling of transport, shippers, transport optimization

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