

## TEACHING MATERIAL GUIDANCE

### 1. Title of the material

*S. Verlinde, C. Macharis, F. Witlox: How to consolidate urban flows of goods without setting up an urban consolidation centre?*

Procedia – Social and Behavioral Sciences 2012;39:687–701.

doi:10.1016/j.sbspro.2012.03.140.

[https://www.researchgate.net/publication/257715668\\_How\\_to\\_Consolidate\\_Urban\\_Flows\\_of\\_Goods\\_Without\\_Setting\\_up\\_an\\_Urban\\_Consolidation\\_Centre](https://www.researchgate.net/publication/257715668_How_to_Consolidate_Urban_Flows_of_Goods_Without_Setting_up_an_Urban_Consolidation_Centre)

### 2. Which section of the SUMP it is relevant to?

It is relevant to section 7.2 which refers to defining integrated measure packages for SUMP.

### 3. Which Mobility Manager knowledge this material is the most relevant to?

The paper is relevant to Section 4 of Mobility Manager knowledge. There is also a connection with Section 1 (Transport and mobility planning), including 1d (development of mobility solutions meeting community challenges) and 1d (evaluation of transport measures).

### 4. Problem approached and content overview

The paper looks for alternatives to a classic urban consolidation centers following their mostly unsuccessful trial implementations and low replicability. However, consolidation of shipments is one of the best solution to reduce the number of freight vehicles in urban areas. Hence a search for alternative consolidation strategies is required to overcome barriers in UCC (urban consolidation centers) development. To achieve this three research areas has been identified:

- a) identification of factors stimulating bundling of shipments in urban freight transport,
- b) evolution of consolidation initiatives is evaluated based on results of several European research projects,
- c) development of a classification of an alternative consolidation-oriented measures based of existing empirical examples.

The most important part of the paper is the last one, which defines a classification of consolidation oriented measures based on their predominant characteristics. Two strategic approaches to consolidation has been identified:

- a) physical – where additional physical transshipment point is added to existing supply chain,
- b) behavioral – which is based changes in operational patterns of at least one of the supply chain stakeholder; e.g retailer can reduce total number of orders with a



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particular supplier in order to enlarge the size of a single delivery instead of several smaller deliveries.

Within a category of behavioral concepts, two new categories have been implemented to further reflect diversity of available solutions:

- a) horizontal – which aims at particular stakeholder group within the supply chain, e.g carriers or receivers,
- b) vertical – which aims at cooperation of different stakeholder groups.

The resulting framework for classification of consolidation oriented solutions is presented in Fig. 1.

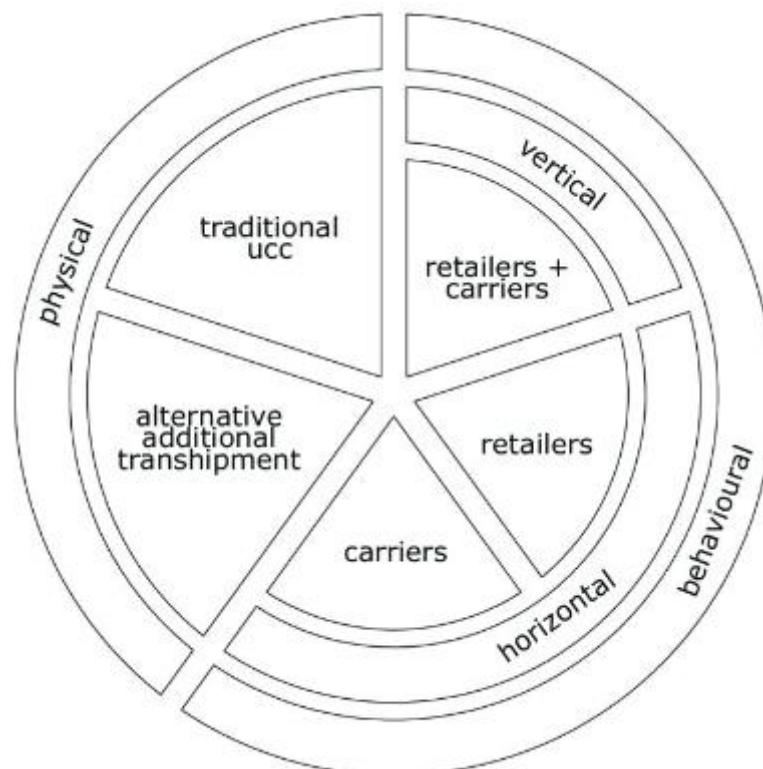


Fig.1 Classification of consolidation oriented solutions.

Further part of the paper describes in detail all forms of consolidation oriented solutions. Attention should be paid to those less known, such as forms of adapted behaviour by receivers and carriers, as well as collaboration between carriers and retailers. They are more challenging for involved stakeholders as require initiative to collaborate, hence are characteristic for more mature markets, where traditional margin for expansion is narrow.

### 5. Who could be interested in this material?

The paper provides an insight into innovative forms of goods consolidation, therefore it could be interesting to those evaluating different options for urban freight policy and factors determining their implementation. These could be local authorities developing

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their potential solutions to incentivise private logistics initiatives as well as entrepreneurs searching for ideas to enhance competitiveness of their businesses.

### 6. What is worth mentioning as an innovative factor for the reader?

- good overview of different concepts of goods consolidation,
- identification of alternative methods of goods bundling in urban freight, different than traditional UCC considered as an separate entity adding another stop in logistics chain
- clear classification of consolidation initiatives based on their predominant characteristics, followed by brief description of each concept.

### 7. Limitations

No major limitations were identified.

