# S@mpler - Integrated Education Based On Sustainable Urban Mobility Projects

#### **TEACHING MATERIAL GUIDANCE**

## 1. Title of the material

## Transport for London: London Freight Consolidation Feasibility Study. Final Report

https://content.tfl.gov.uk/london-freight-consolidation-feasibility-study.pdf

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

It is relevant to section 4.1 which refers to development of scenarios of potential futures. The report is an *ex-ante* evaluation of potential schemes of freight consolidation. Methodology used in the report could be also be applied in section 12.1 to analyse successes and failures as an *ex-post* analysis of such initiatives.

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

It is relevant to Section 4 (logistics and urban freight management). It might also be relevant to 1e) where evaluation of transport measures is concerned.

## 4. Problem approached and content overview

The report has been commissioned by Transport for London to verify which urban freight consolidation models are appropriate in London, including both physical and behavioral models. The study had five general objectives:

- 1. Identification of appropriate models for consolidation in London.
- 2. Robust assessment of their costs and benefits.
- 3. Identification of the operating conditions and policy framework increasing their potential for success.
- 4. Identify parameters for site selection.
- 5. Identification of potential sites for implementation of the studied models.

Methodology applied in the report consisted of two steps:

- 1. Desktop review of available examples of consolidation which led to identification of six different consolidation models.
- 2. Application of a consistent approach for evaluation of each mode in selected site or are of the city.

The consolidation models identified on the basis of desktop review are:

- 1. Enforced and voluntary participation in consolidation in predefined opportunity area.
- 2. Network of consolidation centres serving Central Activities Zone (CAZ).
- 3. Preferred suppliers scheme.
- 4. Micro-consolidation/last mile.
- 5. Outer London town consolidation centre.
- 6. Technology solutions.





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For each model a recommendation whether to further pursue them were provided. It was based on appraisal method composed of several strategic indicators:

#### 1. Traffic flow:

- a. traffic composition assessment on how overall delivery/waste collection vehicle numbers might change after implementation of the measure,
- b. miles travelled comparative indication of vehicle-miles before and after consolidation.
- 2. Air Quality assessment, based on data of traffic composition before and after consolidation scenario.
- 3. Scalability:
  - a. ease of implementation,
  - b. expansion of coverage.
- 4. Economy:
  - a. establishment and operating costs,
  - b. social benefit value,
  - c. cost of delay.
- 5. Political, including policy drivers.

Key recommendations provided by the study include:

- Models that should be pursued in more detail: enforced voluntary participation, preferred suppliers, micro-consolidation/last mile, outer London consolidation centers and technology innovations as good practices already exist. However, transferability and scalability of these models is and option.
- 2. Network of consolidations centers, for example near circular roads, should not be pursued. It is due to the variety of supply chains, different sectors and customers is to vast for a comprehensive network to be established.
- 3. An integrated package of measures including consolidation for different sectors should be considered when possibility of adding value emerge.

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

The report's finding might be very useful for local decisionmakers searching for structured review of factors determining implementation of different models of consolidation. As each identified model is described according to the same profile characteristics it provides a good starting point for identification of critical implementation factors. Students might be interested in conceptual evaluation of each model in terms of expected impact on traffic and emissions.

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

 well designed selection of consolidation models based on uniform profile including information on the relevant examples, scale, vehicle type to service, regulatory framework, requested financial support, target sector, market location, supporting measures, stakeholder feedback; the profile itself is a





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valuable source of information on the consolidation initiatives and allows for easy comparison between them,

- estimation of operational parameters of each model based on available examples; including among others, traffic structure and emission parameters.
- very informative database of consolidation examples which led to identification of models later included in the study,
- presentation (appendix A) of potential locations of selected models.

## 7. Limitations

Assessment of the models is embedded in the existing policy and legal framework in London which impose implementation boundaries for urban freight measures implementation. This should be taken into consideration when evaluating possibilities to transfer selected measure elsewhere.



