



**BESTUFS WP 3.1**

**Report on urban freight data collection in Portugal**

**Final version**

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## **1. OVERVIEW OF DATA COLLECTION IN PORTUGAL**

In the last 10 years, few things have been done concerning data collection on urban freight in Portugal. Although there is more statistical information available now on traffic and transport, there is still little information accessible related specifically to urban freight. The information that is currently collected is still the statistical information on general goods transport, like statistics about the amounts of goods moved by each mode of transport, etc.

Even though the available information in Portugal about urban freight issues is still scarce, data collection on this topic has improved in the last five years. It is expected that it will even improve more in the next five years, due to the increasing problems of congestion and with the increasing concern on environmental problems related to urban goods movements.

Some public institutions have been collecting freight data at the national level for some years and it is possible to have the evolution of some of the collected indicators. The collection of freight data at regional level is more recent and consequently it hasn't yet been reviewed in most of the cases. From these regional studies, it is possible to extract information at urban level. Besides this information, at local level, the capital of Portugal (Lisbon) is collecting data in order to solve specific problems related to urban goods distribution. Medium cities like Lagos and Evora are intending to make studies that support new experiments that these cities are willing to carry out. But these are specific plans, with information not likely to be revised in the future. Other important source of urban freight data can be the studies that support the implementation of Freight Platforms and the Master Plans of Mobility.

The organisations responsible for collecting urban freight data are national government departments and other major public institutions. Portuguese city authorities do not invest on this area, unless it is needed to solve some specific problems.

Once the freight data is collected, usually for a greater geographical area than cities, it is necessary to make some efforts to extract relevant urban data from the total data. When urban freight data is needed, a specific request must be addressed to the organisation that made the collection and pay for it. Thus, urban freight data is in its majority obtained through the extraction of information from regional freight data, which is collected occasionally, with a few studies made in the last 5 years. The process of making the requirement and paying is easy, but it can take some weeks or even months to receive the required data.

Besides the situation described above, there are also a few cities in the country that have a Master Plan of Mobility and that include in this document important freight data. There are also some municipalities like Porto, Lisbon, Evora and Lagos that collected data in order to achieve some specific solutions (occasional collection). Finally, it is also possible that there exist other specific studies that were carried out, but no evidence could be found of other kind of initiatives that result in the collection of urban freight data.

Taking into account this overview, it is also important to identify the gaps that contribute to the general lack of urban freight collection in Portugal. First, Portuguese

institutions are not sufficiently aware of the importance of urban freight issues and how useful it would be to improve urban freight data collection. Second, most of the cities adopt solutions that were already implemented in other cities (benchmarking) usually without a study to support them, and thus don't collect data. Within this context, it is not surprising that there is little information available to use in urban freight modelling.

Financial freight data is still difficult to obtain. Most of the suppliers are still organized in a traditional way and that makes it difficult to get some data, even though it is still possible to have the vehicle operating costs in an aggregate way (statistics). The prices charged for freight transport services can be achieved through an inquiry, but only if they are asked about some specific amount of goods that need to be carried from a certain origin to a certain destination.

In Portugal, a study was made about international Portuguese transport of goods (GEP), which included several aggregate economic statistics and trends for the period 1990-2002. These statistics show the value and volume of imports and exports by economic sector, value-added and overall production by sector, and time series of past trends in economic variables. There exist similar studies to national and regional Portuguese transport of goods, including also economic statistics.

Land use data is easily available in the country. This data is collected every 10 years for the whole country and it is easy (but not free) to obtain all this information for a national, regional, urban, local or even down to block level.

Concerning specifically freight flows, there is also easily available information related to origins and destinations at a national and regional level. The network data is also easily available (but not for free) in the country.

## **2. SUMMARY OF FREIGHT DATA SOURCES IN PORTUGAL**

The following table shows all the relevant data sources identified with relation to city logistics which are available in Portugal.

## Summary of urban freight data collected in Portugal

Type of data collection exercise/survey	Name of data collection/survey	Name of organisation collecting data	Reason for data collection	Is data used for modelling?	Frequency of data collection	Last time data was collected	Type of data collected	Method of data collection	Sample size	Units of measurement used	Geographical area over which data collected	How difficult to extract urban data
Commodity flow survey	-	-	-	-	-	-	-	-	-	-	-	-
Site/Land Use/Establishment surveys	There are several studies carried out on the area of land use, but focused on an architectural/urbanity point of view.											
Transport operator surveys (including driver diary surveys)	LOGNORTE	INEGI – Instituto de Engenharia Mecânica e Gestão Industrial	Identify strategic logistic options for enterprises located on the North Region of Portugal	No.	Occasional (only once)	2002	costs of logistic in the enterprise total costs, lead-time of deliveries, supply chain model of each enterprise, location of main suppliers, location of main sells, average value of the stock, utilization of different modes of transport, quality of service, etc.	Inquire to transport operators and enterprises	51 enterprises belonging to 12 activity sectors	Depends of the indicators	Region North of Portugal.	Very difficult.
Shipper surveys	-	-	-	-	-	-	-	-	-	-	-	-
Receiver surveys	-	-	-	-	-	-	-	-	-	-	-	-

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Good vehicle fleet licensing data	Estatísticas dos Transportes Rodoviários de Passageiros e Mercadorias 1998	INE – Instituto Nacional de Estatística	No specific reason	No	Occasional	1996	Number and type of vehicles, weight, load, age of vehicles, ownership, axes and some cross-indicators	It was based on the plate registration	National and regional level	Depends of the indicators : Tons, years.	National and regional data.	Easy (but not for free)
Traffic counts (goods)	Estatísticas dos Transportes Rodoviários de Passageiros e Mercadorias 1998	INE – Instituto Nacional de Estatística	No specific reason	No	Occasional	1996	Distance travelled, ownership, type of vehicle, weight	Plate registration and inquire.	National and regional level	Depends of the indicators : thousands of km, Tons.	National and regional data.	Difficult (and not for free).
Distribution industry surveys	-	-	-	-	-	-	-	-	-	-	-	-
Vehicle operating cost surveys	-	-	-	-	-	-	-	-	-	-	-	-
Loading/unloading/parking infrastructure data for goods vehicles	Master Plans of Mobility (Lisbon and Portugal)	Municipality of Lisbon and Municipality of Porto	To support the respective Master Plans of Mobility	No	Occasional	2001	Identifies the number, location, capacity and time-windows of these infrastructures	Local observation and counting	City level	Depends of the indicators .	City level.	It can be difficult - bureaucracy (free data).

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Data on road accidents involving goods vehicles	Estatísticas dos Transportes 2003	INE – Instituto Nacional de Estatística	To support some strategic safety measures	No	Yearly	2003	Number of victims, type of vehicle, age of victims, driver's information relating to alcohol exams and type of vehicle.	Based on local counting by the police and hospitals.	National population	Depends of the indicators	National level	Easy (but not for free)
Data on lorry/lorry load thefts	-	-	-	-	-	-	-	-	-	-	-	-
Employment surveys in freight transport and logistics industry	Anuários Estatísticos de Portugal 2003 – Transportes, Armazenagem e Comunicações	INE – Instituto Nacional de Estatística	No specific reason	No	Yearly	2003 (published)	For each region, economic activity and mode of transport: number of enterprises, employed persons, turnover.	Inquire and counting.	Country and North Region.	Number, thousands of euros	Country and North Region.	Easy (but not for free)
Land use databases for town/city needed for freight modelling	Municipalities own the updated databases. It is possible to buy it or buy specific parts or areas.											
Port freight traffic data in the urban area	-	-	-	-	-	-	-	-	-	-	-	-

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Rail freight traffic data in the urban area	-	-	-	-	-	-	-	-	-	-	-	-
Inland waterway freight traffic data in the urban area	-	-	-	-	-	-	-	-	-	-	-	-
Airport freight traffic data in the urban area	-	-	-	-	-	-	-	-	-	-	-	-
Freight informatics data (from cameras, sensors & other automatic data capture devices)	-	-	-	-	-	-	-	-	-	-	-	-

### **3. DETAILS OF SPECIFIC DATA COLLECTION SURVEYS**

The main surveys and data collections on urban freight were identified in the previous table. Those studies are based on data collected occasionally or concerning a specific project. Data collected occasionally is owned by the National Institute of Statistics (INE), who carries out some of these studies on a yearly basis and others every 5 or every 10 years. The INE makes the data collection mainly to support analysis and decision-making in the transport sector; it is not usual to use it for modelling.

Data collection carried out by the INE is done by inquiries included in Census and by direct requirements to organizations and enterprises. Depending on the type of indicators collected, results are presented at an urban, regional or national level. Therefore, the sample is always referred to the total of enterprises, vehicles, population, etc, located on the specific area that is being analysed (urban area, region, etc), which makes this data collection reliable.

Despite the reliable character, the data collection can face some difficulties, namely the extraction of urban results from the total data as well as being restricted to the use of some specific indicators. This might be a disadvantage, since the number of indicators collected by the INE is very limited. Other negative aspect of INE's surveys is that they are not freely available to people and organizations that wish to use it and data collected does not specifically concern urban freight transport (it is broader). On the other hand, the accurate method and its size guarantee reliable data and reliable results to support some analysis or decision-making process.