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METHODOLOGICAL DEVELOPMENT AND HARMONIZATION OF TRANSPORT STATISTICS

Statistics on transport by light goods vehicles

Guidelines for conducting surveys on light goods vehicles

Prepared by Eurostat*

Introduction

Council Regulation (EC) 1172/98 on the carriage of goods by road permits the exclusion from the survey, if the reporting country so wishes, of goods road vehicles with a load capacity (LC) of less than 3.5 tonnes or with a maximum permissible weight (MPLW) below 6 tonnes. Several reporting countries exclude from the survey goods road vehicles with a load capacity of less than 3.5 tonnes or a maximum permissible weight below 6 tonnes.

Consequently, small goods vehicles fall outside the coverage of EU road freight statistics. Because the lower thresholds are not fixed and reporting countries are free to select them, the lower boundary of vehicles included in road freight surveys varies according to the reporting countries.

Four reporting countries - Germany, France, the United Kingdom and Norway - have carried out surveys of small vehicles. Finland made a specific survey on lorries outside the survey frame. Poland estimates the road freight transport performed by small vehicles for national statistics. Other reporting countries include small vehicles in the survey carried out under Council Regulation (EC) 1172/98.

This document presents guidelines for the harmonisation of surveys on road freight transport performed by light goods vehicles. The annexes include examples of methods by countries that have carried out surveys on road freight transport performed by light vehicles.

* The present document was prepared for the Eurostat Meeting of the Working Group on Road Freight Transport Statistics (*Luxembourg, 4 and 5 June 2009*).

Guidelines for a survey on road freight transport performed by light goods vehicles

Data collections on light good vehicles have to take into account their specific use. Thus, some general considerations on the characteristics of this kind of transport will be given. Taking into account the characteristics of this segment will help to optimise the surveys, as we can assume that the use of light goods vehicles is significantly different from that of heavy goods vehicles.

It is important to distinguish between light goods vehicles with a MPLW weight of 3.5 tonnes or less and vehicles between 3.5 and 6 tonnes MPLW. According to Directive 91/439/EEC, vehicles up to 3.5 tonnes MPLW can be driven by a driver with "licence B", which gives significant economic advantages to this class of lorries (e.g. cheaper driver, less administrative burden). Usually the same rules are applied for these lorries as for passenger cars (e.g. speed limits, local bans).

Thus, the share of vehicles below 3.5 tonnes MPLW is very important within the stock of goods vehicles. Unfortunately, data on the vehicle stock are not available for all Member States and the statistics are not broken down by MPLW but by load capacity. Yet, the table below showing the distribution of vehicle stock by load capacity makes the dimension of this vehicle group obvious: assuming that vehicles with a MPLW of 3.5 tonnes will at least have a load capacity of 1.5 tonnes, 78% of all goods vehicles are within this class. In addition, even some vehicles of the load capacity class 1.5 to 3 tonnes can be assumed to have a MPLW of 3.5 tonnes and thus this share will be even higher.

Table 1. Share of goods vehicles in vehicle stock by load capacity (LC) in some EU Member States and Lichtenstein, 2004.

LC	< 1 000	1000 to < 1500	1500 to < 3000	3000 to < 5000	5000 to < 7000	7000 to < 10000	10000 to < 15000	15000 and more
% of vehicles	51%	27%	12%	3%	3%	2%	2%	0%

Data available for CY, LT, LV, HU, NL, AT, PL, FI, SE and LI. Source: Eurostat.

Due to the decrease in the size of consignments, changes in the logistics sector and the cost advantages described above, this segment of light goods vehicles is constantly increasing.

The typical use of the vehicles with MPLW of 3.5 tonnes and below can be characterised by the following examples:

1.) Urban / regional delivery

Examples: postal, parcel and logistics services; delivery services in urban area for non-bulky light products (pharmaceutics, computers, etc.).

The typical use of these vehicles will have one ‘midpoint’ of the tours (e.g. the logistics centre, the warehouse of the company) and several destinations, where the goods are delivered.

2.) Manufacturer / service technicians

The characteristics of this kind of transport are that the transport of workers and their equipment (e.g. tools) is the main purpose of their use. The transport of commodities can even be neglected. Their spatial use will vary strongly (from tours concentrated around a ‘midpoint’ in an urban or regional delivery to the use on a temporal and remote site).

3.) Rental vehicles

The vehicle owner does not know about the concrete use of the vehicle. It is also unrealistic to assume, that an obligation to answer a questionnaire can be put on customers renting a

vehicle for a short period. However, the economic sector of the client could be collected, as well as the total traffic performance (vkm).

Having these characteristics in mind, as well as the experiences of those Member States who have carried out surveys, the recommendations for the light goods vehicle surveys are:

- The survey has to be simpler than the one under Regulation (EC) No 1172/98. Considering the dimension of the total population, only small samples can be drawn, thus any detailed reporting will not bring usable results, but significant burden to the enterprises. In fact, a part of the information collected on heavy lorries will not be available at all.
- The annual mileage of the vehicles can be considered as a key variable. Here, a combination with administrative data or other surveys (e.g. on odometer readings and road counts) would be preferable.
- The information on the type of enterprise (NACE) is important. This in many cases will define sufficiently the type of commodity.
- It has to be discussed, in how far the reporting of journeys will be possible. At least in some cases, when round tours are performed, reporting needs to be strongly simplified.
- The journey-based approach will have the advantage – in theory - of more accurate reporting, but could lead to an underreporting, as the omitting of journeys would reduce the respondent's burden. An aggregated reporting requires some estimation (e.g. average tonnage by the respondent), but might decrease underreporting. Thus, an aggregated reporting is proposed as a more efficient way than journey based reporting.
- If single trips have to be reported, this only has to be done for one day (instead of one week).

Survey on light goods vehicles could partly follow the methodology developed for surveys of road freight transport implemented within Regulation (EC) No 1172/98, and the following guidelines could provide a more specific common basis for such surveys and distinguish them from heavy goods vehicles' surveys:

- Survey could be carried out every five years
- Target population: goods vehicles (vans, combined vehicles and lorries) with a load capacity of less than 3.5 tonnes
- Statistical unit would be the vehicle
- Time unit: 1 week selected within specific weeks chosen over the year; journeys would be reported for just one day during the survey week
- Variables collected:
  - Vehicle-kilometres (total distance travelled in the reporting period)
  - Type of fuel
  - Number of laden trips
  - Number of empty trips
  - Number of round trips
  - Activities at destination places (e.g. delivery of goods, craft works, etc.)
  - Weight – or average weight - of load (commodities and other load, e.g. tools)
  - Weight – or average weight - of goods
  - Tonne-kilometres
  - Current main location of vehicle (e.g. place of the start of the first journey and destination of last journey, the place goods are delivered from or collected to etc.)
- A simplified version of the questionnaire used for survey carried out under Regulation 1172/98 could be used; interactive web-questionnaires (respecting the specific characteristics of this type of vehicles) would be preferable.

The simplified survey described above is mainly designed for vehicles with 3.5 tonnes or less MPLW. As the practice of several Member States shows, the survey of heavy goods vehicle is also applicable for vehicles with more than 3.5 tonnes MPLW and less than 3.5 tonnes load capacity. A five years interval between light goods vehicles' surveys might be sufficient and the heavy goods vehicles' survey could be eased for light goods vehicles.

The vehicle register used for surveys of road freight transport should provide the necessary information on light goods vehicles. However, it could be necessary to identify aspects of the survey where a method different from Regulation (EC) No 1172/98 might be used. These aspects include time unit for the survey, acceptable sample size, a set of common variables to be collected and the percentage standard error to be achieved.

Please note that the implementation of such survey every five years could provide a benchmark for the data provided in the road traffic (vkm) project. Additionally, a quinquennial detailed survey could provide a basis for less detailed annual estimates.

Participants are asked to

1) Take note of the presented proposals for harmonising light goods vehicles' surveys

2) Inform other participants on their plans to carry out light goods vehicle surveys, for example, in the context of the Road Traffic (vkm) project.

Annexes in English only

Annex 1: Methodologies used by countries that carried out specific survey on small vehicles

In order to collect information on this area of road freight transport, Eurostat sent a questionnaire to Member States and Norway in 2006. This questionnaire was seeking information on whether data was available about the carriage of goods by road goods vehicles below the threshold of Council Regulation (EC) 1172/98.

The replies to this questionnaire indicated that four reporting countries - Germany, France, the United Kingdom and Norway - have carried out a special survey of small vehicles. Finland made a specific survey of lorries outside the survey frame. Eurostat asked these countries to provide complete information on the methodologies used for these surveys.

France, Germany, the United Kingdom and Norway have carried out special surveys of small vehicles and plan to repeat surveys in the future. Germany has conducted a survey in 2002 and plans to repeat a survey in 2009. France has data for 2005 and plans to repeat a survey in 2011. The United Kingdom collected data on company-owned vans below 3.5 tonnes MPLW between 2003 and 2005 (when the survey was discontinued) and privately owned vans in 2003. Norway carried out a survey in 2003.

CONCLUSIONS

Countries that carried out surveys on road freight transport performed by light vehicles designed their surveys according to their national needs and these surveys are not fully harmonised among countries. However, they present many common characteristics.

These surveys are all vehicle-based and follow the general principle of sample surveys: a sample of vehicles is extracted from vehicle registers; questionnaires are sent to these vehicles' owners to collect transport performed by the selected vehicles during a given time period; micro-data collected within the survey are grossed up to estimate freight transport at country level.

The scope of the survey is rather homogeneous: vehicles under a certain weight limit (usually the threshold applied by countries for their survey implemented within Regulation (EC) No 1172/98) registered in the reporting country as vans and lorries. Depending on the countries, trailers, combined vehicles or passenger cars are excluded from or included in the target population.

Common information collected includes number of journeys, weight and type of goods, distance travelled and tonne-kilometres performed.

Time units are different among countries: 1 week, 1 day, 2 days, 3 days, global activity during a year.

Stocks of light goods vehicles are very large; therefore sampling rate in space of these surveys is very low. Norway could achieve the highest sampling rate in space because the stock of light goods vehicles is rather small. Germany and France have very large stocks of light goods vehicles; therefore, even if the size of their sample is important, the sampling rate in space is very low.

In these surveys on light goods vehicles, questionnaires collect more information than surveys on heavy road vehicles because countries are interested in monitoring more aspects than only the weight and type of goods transported like, for example, the economic activity of vehicle users, purpose of vehicle use and fuel consumption.

Simplifying assumptions for calculation of tkm were made by Norway. No information about precision standards is available from these surveys.

Summary of methodologies for surveys on road freight transport performed by light vehicles

	Germany	**France**	**United Kingdom**	**Norway**
Target population	Vehicles with a load capacity below 3.5 tonnes belonging to the following categories: commercial passenger cars and motorcycles; private and commercial owned lorries.	All goods vehicles (lorries and vans) with a MPLW less than 3.5 tonnes and less than 20 years old, registered in France. The survey excludes vehicles not registered in standard series (military vehicles, etc.), private cars, trailers and semi-trailers.	Sampled vehicles must not exceed 3.5 tonnes MPLW weight and be in the light goods taxation class with van body types according to DVLA (Driver and Vehicle Licensing Agency) records.	All goods vehicles with a load capacity less than 3.5 tonnes, which are registered as operational in the Norwegian Register of Vehicles at some point in 2008. The survey covers vans, combined vehicles and lorries, but not private cars and buses
Statistical unit	Vehicle	Vehicle	Vehicle	Vehicle
Time unit	One day, selected randomly within the survey period	Global use of the vehicle during the year 2005 and the use during two days of a week of March 2006.	Company owned van survey Three days activity for each vehicle in sample	One week (within eight specific survey weeks - two consecutive weeks each quarter of the year).
Variables / information collected	Number of journeys (single and multi-stop journeys) Kilometres Tonne-kilometres Passenger-kilometres Duration of the transport (time where the vehicle is in movement) Length and structure of multi-stop journeys	Vehicle fleet Traffic, distance travelled Type and weight of goods Fuel consumption Activity branch of the users and use of vehicles	Private van survey Distance, reason for travel, time of travel, number of passengers, start/end location, location type and goods carried Company owned van survey Business (type, size, vehicle ownership), vehicle (type, annual mileage, survey mileage) and journey info (distance, reason for travel, time of travel, no of passengers, start/end location, location type and goods carried)	Vehicle-kilometres (total distance travelled and distance travelled with goods) Weight of goods Tonne-kilometres Number of journeys with goods Type of goods
Stratification	Type of vehicle Age of vehicle Private / commercial vehicle Region of registration NACE of transport enterprise Motor capacity Type of propulsion engine	Type of activity of the owner of the vehicle Load capacity Age of vehicle Type of energy used by the vehicle	Private van survey Government Office Regions and van type (from DVLA records) Company owned van survey Government Office Regions and body type (from DVLA records)	Vehicle groups - according to load capacity and type of vehicle – and regions
Sample size / Non response	Sampling rate in space: 0.17% Questionnaires used: 56.5%	Sampling rate in space: 0.4% Questionnaires used: 60%	Private van survey Questionnaires used: 21% Company owned van survey Response rate 84% Questionnaires used: 67%	Sampling rate in space: 2.3% Response rate: 90% Questionnaires used: 70-80%

Notes: Questionnaires used = number of used questionnaires / gross sample size.

Germany

Survey on light freight vehicles was conducted in 2002 on voluntary basis. It is a supplement to the road freight survey under Council Regulation (EC) No 1172/98.

The **target population** for the survey consists of vehicles with a load capacity of less than 3.5 tonnes belonging to the following categories: commercial passenger cars and motorcycles as well as private and commercial lorries. The resulting **sampling frame** for the survey consists of approximately 53 millions vehicles. The survey was based on the Central Register of Road Vehicles. The gross **sample size** of the survey was 92 000 vehicles.

About 52 000 questionnaires could be used. For each vehicle, the questionnaire asked information about global use of the vehicle during one day, selected randomly within the survey period (October 2001 to December 2002).

The survey collected the following information:

- Number of journeys (single and multi-stop journeys)
- Vehicle-kilometres
- Tonne-kilometres
- Passenger-kilometres
- Duration of the transport (time when the vehicle is in movement)
- Length and structure of multi-stop journeys

In addition, combining information from the survey with other sources provided information on:

- Number of journeys performed for commercial activities
- Number of journeys by vehicle
- Reason and duration of commercial activities on the place of unloading

The survey was conducted according to the following **stratification**:

- Type of vehicle
- Age of vehicle
- Private / commercial vehicle
- Region of registration
- NACE of transport enterprise
- Motor capacity
- Type of propulsion engine

FRANCE

Survey on light freight vehicles was conducted in 2006 to collect transport performance for the reference year 2005. It is a supplement to the road freight survey under Council Regulation (EC) No 1172/98.

The **target population** for the survey consists of all goods vehicles (lorries and vans) with a MPLW of less than 3.5 tonnes and less than 20 years old, registered in France. The survey excludes vehicles not registered in standard series (military vehicles, etc.), private cars, trailers and semi-trailers. Vans registered as commercial vehicles are included in the survey. The

resulting **sampling frame** for the survey consists of approximately 6 200 000 light goods vehicles. The gross **sample size** of the survey was 25 000 vehicles.

The **stratification** takes into account the type of activity of the owner of the vehicle, the load capacity of the vehicle, the age of the vehicle and the type of energy used by the vehicle. There were two different questionnaires: one for road transport enterprises and post offices and another one for enterprises with another activity, public administrations, associations and private individuals.

About 15 000 questionnaires could be used. For each vehicle, the questionnaire asked information about global use of the vehicle during the year 2005 and the use during two days of a week of March 2006.

The survey collected information on vehicle fleet, traffic, distance, type and weight of goods and fuel consumption. The activity of the users of light freight vehicles is also described, as well as the use of the vehicles.

At the beginning of 2006, 5.5 million of light freight vehicles were in service, of which 38% are privately owned. These vehicles performed 77 billion kilometres during 2005, almost four times more than the distance travelled by freight vehicles over 3.5 tonnes load capacity. These vehicles are used to carry tools, equipments and materials used for services, to transport goods (delivery or collection and transport for own account or hire or reward), to go from home to the working place or to make non- professional trips. The vehicle stock in use represents a potential of 4.4 million tonnes of load capacity, with 75% of vehicles having a load capacity of less than 1 tonne.

UNITED KINGDOM

Survey of van activity was conducted in 1998/1999, but it suffered from non-response and underreporting. This was judged to have happened because of attempting to collect information on both privately- and company-owned vans in the same survey, and this survey was terminated before completion.

It was decided that the best way forward was to have two separate surveys, one for company-owned and one for private vans. Van was decided to be company-owned if name of registered keeper was a Company or Company (Messrs); privately owned if anything else e.g. Mr, Mrs, Miss, Rev, Dr etc.

Sampled vehicles must not exceed 3.5 tonnes MPLW weight and be in the light goods taxation class with van body types according to DVLA (Driver and Vehicle Licensing Agency) records. Both surveys had a slightly different form for multi-stop journeys.

1. Private van survey (October 2002 - September 2003)

- MORI (Market & Opinion Research International) was commissioned to conduct a one-year survey from October 2002.
- Sample was drawn quarterly from DVLA database and stratified by Government Office Regions and van type.
- Details of owners were given to interviewers each month – they were given details of more owners than they actually required due to difficulty in gaining the information.

- The survey was interview based, which included a diary to record two days activity in survey period.
- Interview collected van type, main usage, industry worked in, occupation and personal info.
- Diary recorded distance, reason for travel, time of travel, number of passengers, start/end location, location type and goods carried.
- Returned information from initial sample frame (11 931 leads) was 21%. From attempted leads, it was 37%.
- Analysis consisted of 2 549 returns which were grossed up to represent the total privately owned van population.

Key findings for privately owned vans during the year ending September 2003 include:

- Around three quarters (77%) of all trips are business/work related, with the remainder for personal activity.
- The most common uses for a van are travelling to and from work. These two activities combined account for 38% of all trips made and 45% of the total distance travelled.
- On average, trips made for personal use (mean = 13 km) are significantly shorter than those made for business use (mean = 20 km).
- 81% of trips take place on weekdays. There is little variability in the number of trips on each weekday, whilst significantly fewer occur at the weekend, with 12% on Saturday and only 8% on Sunday.
- The peak periods during the week are between 8 am and 9 am, and 4 pm and 5 pm when around a quarter of vans are on the road.
- At weekends, during the period from 8 am to 6 pm around 10% of vans are on the road.
- The construction industry accounts for the most vehicle kilometres (41%). Personal use only follows with 13% of all vehicle kilometres.
- Around 28% of vehicle kilometres are empty.
- 91% of trips both start and end in the same Government Office Region and 77% of distance travelled is within the same Government Office Region

2. Company owned van survey (April 2003 - December 2005)

- Questionnaire posted requested information about three days activity for each vehicle in sample.
- Sample was stratified by Government Office Regions and body type from DVLA records.
- The survey was spread evenly through the year and by day of week of activity.
- The cover letter stated that the owner was legally required to fill out the form under the Statistics of Trade Act.
- Questionnaire asked info on business (type, size, and vehicle ownership), vehicle (type, annual mileage, survey mileage) and journey (distance, reason and time of travel, no of passengers, start/end location, location type and goods carried).
- 19 783 forms were sent out with 86% returned and 67% used in the analysis. Response rate was 84%.

Key findings for company owned vans from the survey for 2004 are:

- A third (32%) of the distance travelled by company vans was in connection with the collection or delivery of goods.
- A third (32%) of travel was performed between home and work, and a quarter (24%) when vans were travelling between jobs.
- Only 3% of the distance travelled was for personal use.
- The peak periods for travel during the week were between 7 am and 9 am, and between 4 pm and 6 pm when around 30% of vans were in use.
- At weekends, no more than 4% of vans were in use during any one-hour period.
- The construction industry accounted for around a third (31%) of vehicle kilometres and the wholesale and retail trade a fifth (21%).
- The transport of tools, machinery and equipment accounted for just over half (53%) of all travel.
- Vans were empty for 16% of total distance travelled.
- 86% of distance travelled was for journeys that start and end in the same Government Office Region. For journeys that started in London the share was just over two thirds (70%), while journeys that started in Scotland nearly all (98%) also ended there.
- 13% of distance was travelled with vans over three quarter full, and 39% with vans less than one quarter full.
- Company van activity accounted for 11 billion tonne-kilometres, about 7% of all freight activity on GB roads.

After consulting with users, and taking account of the need to minimise the burden on respondents, it was decided that the survey no longer needed to be carried out continuously. 2005 was therefore the last year of the survey in this form. In future data will be obtained by means of ad hoc surveys carried out at regular intervals.

NORWAY

Statistics Norway is currently conducting a survey on the transport performances of light goods vehicles in 2008, as a supplement to the Norwegian survey on road goods transport carried out according to Council Regulation (EC) No 1172/98.

The three main transport performance variables to be disseminated are:

- Vehicle-kilometres travelled
- Total weight of goods carried (tonnes)
- Tonne-kilometres performed (tonne-kilometres)

These variables are distributed by five main classifications:

- Type of vehicle
- Type of use
- Type of transport
- Type of goods carried

- Region (specified by county or NUTS 2 level in Norway and by transport outside Norway).

1. Population and sample design

The **target population** for the survey consists of all goods vehicles with a load capacity of less than 3.5 tonnes, which are registered as operational in the Norwegian Register of Vehicles at some point in 2008. The survey covers vans, combined vehicles and lorries, but not private cars and buses (emphasis is on goods transport). The resulting **sampling frame** for the survey consists of approximately 430 000 light goods vehicles. The gross **sample size** of the survey has been raised to 10 000 vehicles. The total sample of 10 000 vehicles is divided into four quarterly samples of 2 500 vehicles each. These 2 500 vehicles in each quarterly sample are distributed randomly between the two survey weeks of the quarter.

Overall, the **response rate** for the survey on light goods vehicles in Norway was just above 90% in the first quarter of 2008.

The new survey on light goods vehicles will be carried out during a total of eight weeks in 2008. In order to reduce the potential bias from seasonal differences in transport performances, two survey weeks have been chosen in each quarter of 2008. For practical reasons, the survey will be conducted in two consecutive weeks in each quarter. The light goods vehicles in the sample are distributed evenly among the survey weeks. All the owners of light goods vehicles in the sample are asked to report on the transport performances of one specific week of 2008.

In order to reduce the sampling error as much as possible, the sample frame is divided into five main vehicle groups according to load capacity and type of vehicle, which leads to the following **stratification**:

- Light lorries (load capacity of less than 3.5 tonnes)
- Small combined vehicles (load capacity of less than 1 tonne)
- Large combined vehicles (load capacity between 1 and 3.5 tonnes)
- Small vans (load capacity of less than 1 tonne)
- Large vans (load capacity between 1 and 3.5 tonnes).

The vehicles within each vehicle group are also stratified by county in Norway.

2. Questionnaire

The main questions of the survey are designed to gather information on the key variables needed to calculate the transport performances of each vehicle in the sample:

- Number of journeys with goods during the survey week
- Total weight of goods carried during the survey week
- Total distance travelled during the survey week
- Total distance travelled with goods during the survey week.

For classification purposes, the respondents are also asked to contribute information on the following characteristics:

- Activity of the vehicle during the survey week (in use, discarded, sold, not in use)

- Type of use during the survey week (multi-stop journeys with goods carried, single-stop journeys with goods carried, service trips with some goods and parts carried, service trips without goods or parts carried and private use)
- Type of transport during the survey week (hire or reward, own account)
- Type of goods carried during the survey week (main categories selected from NST 2007: 01 Food products, 06 Wood and products of wood (paper), 11 Machinery and equipment, 15 Mail, parcels, 18 Grouped goods and 20 Other goods)
- Regional distribution of distance travelled during the survey week (by county in Norway).

The questionnaire also contains the following three questions intended for use in other statistics, for further analysis of the data or strictly for control purposes:

- The postal code of the area where most journeys started during the survey week
- Average amount of fuel consumption (litres per kilometre)
- Total distance travelled in 2007.

In addition to the data collected in the survey itself, a variety of information on the vehicles is available from the Norwegian Register of Vehicles, which is managed by the Norwegian Directorate of Public Roads. These data include: type of vehicle, load capacity, total permissible weight of vehicle, type of fuel used, age of vehicle and other technical and tax related information.

3. Data processing and analysis

Total quarterly estimates for the performance variables are given by multiplying the average number of vehicles in each stratum of the population by the calculated means from the corresponding strata in the sample.

For vehicles, which are mainly involved in single-stop journeys, the tonne-kilometres are calculated by multiplying the average total weight of goods carried during the survey week by the total distance travelled with goods:

(1) Tonne-kilometres performed = [total weight of goods carried (tonnes) / number of journeys with goods] * [total distance travelled with goods (km)]

For vehicles, which are mainly involved in multi-stop journeys, the tonne-kilometres are calculated by using the formula:

(2) Tonne-kilometres performed = ½ [total weight of goods carried (tonnes) / number of journeys with goods] * [total distance travelled with goods (km)] * (1 + ½).

ANNEX 2: SPECIFIC DATA COLLECTIONS PERFORMED BY OTHER COUNTRIES

Hungary and Sweden reported that surveys carried out under Council Regulation (EC) 1172/98 for some years also covered the smaller vehicles.

Hungary indicated that between 1998 and 2nd quarter of 2002, lorries with a load capacity between 1 and 3.5 tonnes were included in the survey (same questionnaire as for other weight categories) under Regulation 1172/98. Their number represented roughly 2/3 of the sample frame with transport performances with less than 10%. HCSO was happy with the possibility to exclude the small vehicles, since this category caused the main problems for both register quality and response rate issues. Since 3rd quarter of 2002, Hungary excludes from the survey vehicles with a load capacity under 3.5 tonnes.

Sweden carried out a sample survey for vehicles with a load capacity between 200 and 3 499 kg for the following quarters: 4th quarter of 1999, 1st quarter of 2000, 2nd quarter of 2000 and 3rd quarter of 2000. A sample of about 1 600 lorries in operation was selected each quarter from a population of roughly 210 000 lorries with a load capacity of 200 – 3 499 kg. Only company owned lorries were included. Swedish light vehicles performed 3 188 million km on Swedish roads from the 4th quarter of 1999 and up to and including 3rd quarter of 2000. 90% of lorries performed on own account. Kilometres driven with load represented 85% of total kilometres driven. Transport of building materials amounted to one third of kilometres driven with load. County division showed that 21 per cent of kilometres were driven in the county of Stockholm, 17 per cent in Västra Götaland and 12 per cent in Skåne.

Finland made a sample survey in 2003 to estimate the amount of vehicle-kilometres made by lorries (gross weight > 3.5 tonnes) outside the survey frame (museum vehicles and special vehicles that are not especially destined to transport goods, like driving school vehicles, vehicles

for sale or lease, mobile cranes, excluding military vehicles). The sampling frame was the HGVs register without those vehicles included in the regular survey. The survey was made by phone, asking about 5% randomly selected vehicle owners an estimate of the annual traffic performance. A sample of 350 lorries was drawn from 5 698 lorries to estimate vehicle-kilometres. 232 out of the 350 responded. It was estimated that 75.6 million vehicle-kilometres were made by the 5 698 lorries, which was 3% of the total vehicle-kilometres.

Annex 3: Thresholds on vehicle weight

The following table gives the different lower weight limits used as cut-offs for the surveys carried out by reporting countries under Council Regulation (EC) 1172/98 for the 1st quarter of 2007.

Countries where data for vehicles under thresholds allowed by Council Regulation (EC) 1172/98 (i.e. vehicles with load capacity below 3.5 tonnes or MPLW below 6 tonnes) might be reported to Eurostat under are highlighted.

Belgium	Excludes vehicles with LC < 1 tonne
Bulgaria	Excludes vehicles with MPLW < 6 tonnes
Czech Republic	Excludes vehicles with LC < 2 tonnes
Denmark	Excludes vehicles with MPLW < 6 tonnes
Germany	Excludes vehicles with LC < 3.5 tonnes
Estonia	Excludes vehicles with LC< 3.5 tonnes
Ireland	Excludes vehicles with unladen weight < 2 tonnes
Greece	Excludes vehicles with LC < 3.5 tonnes and MPLW < 6 tonnes
Spain	Excludes vehicles with LC < 3.5 tonnes and MPLW < 6 tonnes
France	Excludes vehicles with MPLW < 3.5 tonnes
Italy	Excludes vehicles with LC < 3.5 tonnes
Cyprus	Excludes vehicles with LC < 3 tonnes
Latvia	Includes all freight vehicles
Lithuania	Excludes vehicles with MPLW < 6 tonnes
Luxembourg	Excludes vehicles with LC < 3 tonnes
Hungary	Excludes vehicles with LC < 3.5 tonnes
Netherlands	Excludes vehicles with LC < 2 tonnes
Austria	Excludes vehicles with LC < 2 tonnes
Poland	Excludes vehicles with MPLV < 3.5 tonnes - sol LC will be lower
Portugal	Excludes vehicles with MPLW < 3.5 tonnes - sol LC will be lower
Romania	Excludes vehicles with LC < 3.5 tonnes
Slovenia	Excludes vehicles with LC < 2 tonnes
Slovakia	Includes all freight vehicles
Finland	For national transport, excludes vehicles with MPLW < 3.5 tonnes – so load capacity will be lower

Sweden	Excludes vehicles with LC < 3.5 tonnes
United Kingdom	For national transport, excludes vehicles with MPLW < 3.5 tonnes – so load capacity will be lower
Croatia	Excludes vehicles with LC < 3.5 tonnes
Liechtenstein	Excludes vehicles with MPLW < 6 tonnes
Norway	Excludes vehicles with LC < 3.5 tonnes
Switzerland	Excludes vehicles with MPLW < 3.5 tonnes - sol LC will be lower

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