Economic Commission for Europe

Inland Transport Committee

Working Party on Transport Statistics

Sixty-first session
Geneva, 1–3 June 2010
Item 3 (f) of the provisional agenda
Methodological development and harmonization of transport statistics

Pilot questionnaire on road traffic performance

Note by the secretariat

I. Mandate

1. The Working Party, at its sixtyeth session in June 2009, decided to consider the results of the pilot questionnaire on road traffic performance (ECE/TRANS/WP.6/157, para. 31).

2. The secretariat presents below the main information on data availability as presented to the task Force on the measurement of road traffic volumes in Vehicle-Km organized by Eurostat on 29 April 2010 and the conclusions of this Task Force.

II. Data availability

3. By the end of January 2010, 22 countries had delivered data:
   - EU Member states: Bulgaria, Germany, Denmark, Estonia, France, Ireland, Cyprus, Lithuania, Latvia, Hungary, Netherlands, Poland, Romania, Slovenia, Sweden, Finland and United Kingdom.
   - Other European countries: Croatia, FYR of Macedonia, Norway.
   - Other: Canada, USA.

4. Table 1. Availability of statistics on the volume of road traffic in VKm, by country and table, reference year 2008.
   
   Only Latvia has provided data for all tables.
All countries have provided data for table 1. 14 countries have provided data for table 2 and 10 countries for table 3. Only 3 countries have provided data for tables 4a and 4b.

Completeness rates for table 1 are less than 1/3, with only three exceptions. Only Poland has a high rate.

Tables 2 and 3 have high rates in more countries than table 1. It seems that national authorities find it difficult to distinguish vehicles by nationality and split traffic between national and foreign territories (table 1), while traffic on national territory only is easier to break down by type of road (table 2) or age of vehicle (table 3).

Table 2. Number of countries that provided data for each cell of “Table 1. Road traffic by type of vehicle”, for reference year 2008.

- More information is available about traffic on national territory by national vehicles or all vehicles or about total traffic of national vehicles.
- The more detailed the breakdown by vehicle type the less data become available. Availability for detailed types of vehicle is greater for the total traffic of national vehicles.
- Petrol and diesel-fuelled passenger cars and goods vehicles weighing less than 3.5 tonnes are the detailed vehicle types with greater availability.

Table 3. Number of countries that provided data for each cell of “Table 2. Road traffic on national territory by type of vehicle and type of road”, for reference year 2008.

- There is more uniform coverage of the table’s cells than was the case in table 1 of the data collection.
- There are more data about total traffic or traffic on the broad breakdown by type of road.
- Completeness drops for detailed types of vehicle, which in this table are all types of goods vehicles.

Table 4. Number of countries that provided data for each cell of “Table 3. Road traffic on national territory by type and age of vehicle”, for reference year 2008.

- For most vehicle types there is a small group of around five countries that can provide road traffic volumes by age class of the vehicles.
- Some additional countries have provided only the total traffic of passenger cars, buses and coaches and motorcycles.

A general observation is that cells, which are common in tables 1 – 3 of the voluntary data collection, do not appear with the same number of countries having provided data for them. One such example are passenger cars, for the total traffic of which on national territory 12 countries have provided data in table 1, 11 countries in table 2 and 9 countries in table 3.

From the pattern of available data it seems possible that in some cases countries report only national vehicles in tables 2 and 3. However, except for the countries which received grants, and where we do not note such discrepancies, we do not have the necessary methodological information to our disposal. In other cases some authorities chose not to provide data for tables 2 or 3 and left all cells blank, hence the discrepancy.
III. Conclusions

10. The Task Force agreed on the following approach:

   • The collection of this data would continue on a voluntary base up to the revision of Directive 2009/40/EC. A new Task Force should be set up by Eurostat with the objectives of analysing the newly available data and considering a future mandatory collection.

   • In the initial phase (voluntary data collection), the countries would provide the data they can collect and a detailed explanation for the empty cells (data unavailable). This information will be determinant for the tuning of the mandatory data collection. The Task Force then discussed the proposed tables and agreed on the attached modified structure (see annex).

11. It was underlined the importance to establish a methodological collaboration between the countries in order to exchange practices for harnessing the odometer readings, in particular to obtain comparable data.

IV. Annexes

Tables for the collection of road traffic volumes in vkm
Table 1
Road traffic on national territory by type of vehicle
(Million vehicle kilometres)

<table>
<thead>
<tr>
<th>Type of vehicle:</th>
<th>Road traffic by</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All vehicles (national and foreign)</td>
<td>National vehicles</td>
</tr>
<tr>
<td><strong>Passenger cars (a)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Petrol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diesel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Buses and motor coaches (b)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Buses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Motor coaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Motorcycles and mopeds (c)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Motorcycles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mopeds</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goods vehicles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MPW ≤ 3.5 tonnes (d)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Petrol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diesel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.5 &lt; MPW ≤ 6 tonnes (e)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diesel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MPW &gt; 6 tonnes (f)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lorries and road trains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Road tractors and articulated vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other motorised vehicles (g)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bicycles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (a+b+c+d+e+f+g)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Road traffic on national territory for national and foreign vehicles by type of vehicle and type of road
(Million vehicle kilometres)

<table>
<thead>
<tr>
<th>Type of vehicle:</th>
<th>Motorways / freeways</th>
<th>Other roads Total</th>
<th>inside built-up areas</th>
<th>outside built-up areas</th>
<th>Total</th>
<th>Of which on Trans-European Networks (TEN-T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2) = (3) + (4)</td>
<td>(3)</td>
<td>(4)</td>
<td>(1+2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Passenger cars (a)
Buses and motor coaches (b)
  • Buses
  • Motor coaches
  • Other
Motorcycles and mopeds (c)
Goods vehicles (d)
  • MPW ≤ 3.5 tonnes
  • 3.5 < MPW ≤ 6 tonnes
  • MPW > 6 tonnes
Other motorised vehicles (e)

TOTAL (a+b+c+d+e)
Table 3
Road traffic on all territories for national vehicles by type and age of vehicle
(Million vehicle kilometres)

<table>
<thead>
<tr>
<th>Age of vehicle (years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td>6-7</td>
<td></td>
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<tr>
<td>8-9</td>
<td></td>
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<tr>
<td>10-11</td>
<td></td>
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<tr>
<td>12-13</td>
<td></td>
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<tr>
<td>14-15</td>
<td></td>
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<tr>
<td>16-17</td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td></td>
</tr>
<tr>
<td>20 or more</td>
<td></td>
</tr>
</tbody>
</table>

Type of vehicle:

Passenger cars
- Petrol (E5)
- Diesel (B5)
- Other fuel
- LPG
- NG/CNG/
  Bio-methane
- Hydrogen
- Bi-fuel:
  petrol/LPG
- Bi-fuel:
  petrol/NG
- Bi-fuel:
  petrol/Hydrogen
- Bi-fuel:
  petrol/E85
- Flex-fuel:
  Diesel/bio-Diesel
- Pure electric
  vehicle
- Multi-fuel
  (excluding fuel with designated...
### Road traffic by Age of vehicle (years)

<table>
<thead>
<tr>
<th>Age of vehicle (years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4-5</td>
<td></td>
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<tr>
<td>6-7</td>
<td></td>
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<tr>
<td>8-9</td>
<td></td>
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<tr>
<td>10-11</td>
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<tr>
<td>12-13</td>
<td></td>
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<tr>
<td>14-15</td>
<td></td>
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<tr>
<td>16-17</td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td></td>
</tr>
<tr>
<td>20 or more</td>
<td></td>
</tr>
</tbody>
</table>

(1+2+3+4 +5+6+7+8 +9+10+11 + 12+13)

**Type of vehicle:**

**coding)**

**Buses and motor coaches (Total)**
- Petrol (E5)
- Diesel (B5)
- Other fuel
- LPG
- NG/CNG/
  Bio-methane

**Buses**
- Diesel (B5)
- Other fuel

**Motor coaches**
- Diesel (B5)
- Other fuel

**Other**
- Petrol (E5)
- Diesel (B5)
- Other fuel
- LPG
- NG/CNG/
  Bio-methane

**Motorcycles**

**Goods vehicles**
### Road traffic by Age of vehicle (years)

<table>
<thead>
<tr>
<th>Age of vehicle (years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type of vehicle:**

**MPW \leq 3.5 tonnes**
- Petrol (E5)
- Diesel (B5)
- Other fuel
- LPG
- NG/CNG/ Bio-methane

**3.5 < MPW \leq 6 tonnes**
- Diesel (B5)
- Other fuel

**MPW > 6 tonnes (Total)**
- Diesel (B5)
- Other fuel

**Lorries and road trains**
- Diesel (B5)
- Other fuel

**Road tractors and articulated vehicles**
- Diesel (B5)
- Other fuel
GLOSSARY OF DEFINITIONS

Road traffic
Any movement of a road vehicle on a given network.

When a road vehicle is being carried on another vehicle, only the movement of the carrying vehicle (active mode) is considered.

Road traffic on national territory
Any movement of road vehicles within a national territory irrespective of the country in which these vehicles are registered.

Vehicle-kilometre (VKm)
Unit of measurement representing the movement of a road motor vehicle over one kilometre.

The distance to be considered is the distance actually run. It includes movements of empty road motor vehicles.

Units made up of a tractor and a semi-trailer or a lorry and a trailer are counted as one vehicle.

Road motor vehicle
A road vehicle fitted with an engine whence it derives its sole means of propulsion, which is normally used for carrying persons or goods or for drawing, on the road, vehicles used for the carriage of persons or goods.

The statistics exclude motor vehicles running on rails.

National road vehicle
A road vehicle registered in the reporting country and bearing registration plates of that country or having been separately registered (trams, trolleybuses, etc.).

Where registration of a road vehicle does not apply in a specific country, a national road vehicle is a vehicle owned or leased by a person or company tax resident in that country.

Foreign road vehicle
A road vehicle registered in a country other than the reporting country and bearing registration plates of that foreign country.

Passenger car
Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver).

Included are:

a) Passenger cars
b) Vans designed and used primarily for transport of passengers
c) Taxis
d) Hire cars
e) Ambulances

f) Motor homes.

Excluded are light goods road vehicles as well as motor-coaches, buses, and minibuses/mini-coaches.

“Passenger car” includes microcars (needing no permit to be driven), taxis and passenger hire cars, provided that they have fewer than ten seats.

Bus

Passenger road motor vehicle designed to carry more than 24 persons (including the driver), and with provision to carry seated as well as standing passengers.

The vehicles may be constructed with areas for standing passengers, to allow frequent passenger movement, or designed to allow the carriage of standing passengers in the gangway.

Motor coach

Passenger road motor vehicle designed to seat 24 or more persons (including the driver) and constructed exclusively for the carriage of seated passengers.

Mini-bus / mini-coach (Others)

Passenger road motor vehicle designed to carry 10-23 seated or standing persons (including the driver).

The vehicles may be constructed exclusively to carry seated passengers or to carry both seated and standing passengers.

Motorcycle

Two-, three- or four-wheeled road motor vehicle not exceeding 400 kg (900 lb) of unladen weight. All such vehicles with a cylinder capacity of 50 cc or over are included, as are those under 50 cc which do not meet the definition of moped.

Moped

Two, three or four-wheeled road motor vehicle which is fitted with an engine having a cylinder capacity of less than 50cc (3.05 cu.in) and a maximum authorized design speed in accordance with national regulations.

Registered and non-registered mopeds in use are included, whether or not they have a number plate. Some countries do not register all mopeds.

Goods road vehicle

Road vehicle designed, exclusively or primarily, to carry goods.

Included are:

a) Light goods road vehicles with a gross vehicle weight of not more than 3 500 kg, designed exclusively or primarily, to carry goods, e.g. vans and pick-ups

b) Heavy goods road vehicles with a gross vehicle weight above 3 500 kg, designed, exclusively or primarily, to carry goods

c) Road tractors

d) Agricultural tractors permitted to use roads open to public traffic.
Gross vehicle weight (Legally permissible maximum weight (MPW))
Total of the weight of the vehicle (or combination of vehicles) including its load when stationary and ready for the road declared permissible by the competent authority of the country of registration.

This includes the weight of the driver and the maximum number of persons permitted to be carried.

Lorry / truck
Rigid road motor vehicle designed, exclusively or primarily, to carry goods.

Road train
Goods road motor vehicle coupled to a trailer.
Articulated vehicle with a further trailer attached is included.

Trailer
Goods road vehicle designed to be hauled by a road motor vehicle.
This category excludes agricultural trailers and caravans.

Road tractor
Road motor vehicle designed, exclusively or primarily, to haul other road vehicles which are not power-driven (mainly semi-trailers).
Agricultural tractors are excluded.

Articulated vehicle
Road tractor coupled to a semi-trailer.

Semi-trailer
Goods road vehicle with no front axle designed in such way that part of the vehicle and a substantial part of its loaded weight rests on a road tractor.

Other motorized vehicles
There is not any definition on the Glossary for this category, but it can be defined as any other road motor vehicle not included in the previous categories.

(Bi)cycle
A road vehicle which has two or more wheels and generally is propelled solely by the muscular energy of the persons on that vehicle, in particular by means of a pedal system, lever or handle (e.g. bicycles, tricycles, quadricycles and invalid carriages).
Included are cycles with supportive power unit.

Motorway / freeway
Road, specially designed and built for motor traffic, which does not serve properties bordering on it, and which:
a) Is provided, except at special points or temporarily, with separate

   carriageways for traffic in two directions, separated from each other, either by a dividing

   strip not intended for traffic, or exceptionally by other means

b) Has no crossings at the same level with any road, railway or tramway track,

or footpath

c) Is especially sign-posted as a motorway and is reserved for specific
categories of road motor vehicles.

Entry and exit lanes of motorways are included irrespective of the location of the sign-
posts.

Urban motorways are also included.

Road inside a built-up area: urban road

Road within the boundaries of a built-up area, with entries and exits sign-posted as such.

Roads inside a built-up area often have a maximum speed limit of around 50 km/h.

Excluded are motorways, express roads and other roads of higher speed traversing the
built-up area, if not sign-posted as built-up roads. Streets are included.

Road outside a built-up area

Road outside the boundaries of a built-up area, which is an area with entries and exits sign-
posted as such.

Trans-European Network (TEN-T)

This makes reference to the roads shown in the maps included in the following three legal
texts:

- For former EU15 Member States: Decision No 884/2004/EC of the European
  Parliament and of the Council of 29 April 2004 amending Decision No 1692/96/EC
  on Community guidelines for the development of the trans-European transport
  network (corrected version in OJ L 201 of 7 June 2004; road maps on pages 11-
  26)
  
  Search&_submit=Search&ihmlang=en

- For EU10 (Ten Member States joining the EU in 2004): Chapter 8 "Transport
  policy" of Annex II to the Act concerning the conditions of accession of the Czech
  Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia,
  the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the
  Republic of Poland, the Republic of Slovenia and the Slovak Republic and the
  adjustments to the Treaties on which the European Union is founded (OJ L 236 of
  23 September 2003; road maps on pages 469 to 494, but only those
  corresponding to EU10 Member States are still valid)
  
  Search&_submit=Search&ihmlang=en

- For Bulgaria and Romania: Council Regulation (EC) No 1791/2006 of 20 November
  2006 adapting certain Regulations and Decisions by reason of the accession of
  Bulgaria and Romania (OJ L363 of 20 December 2006; road maps on pages 39-
  41)
  
  Search&_submit=Search&ihmlang=en
Age of road vehicle

Length of time after the first registration of the road vehicle, irrespective of the registering country.