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Collection and dissemination of statistics

by the United Nations Economic Commission for Europe

UNECE Road Map on Collection and Dissemination of Transport Statistics

Note by the secretariat

I. Mandate

1. The Working Party, at its sixtieth session in June 2009, welcomed the data gap analysis undertaken by the secretariat as a first step to improve data collection procedures and to possibly streamline data coverage in the common questionnaire in accordance with country needs and data availability (ECE/TRANS/WP.6/2009/6). It decided to consider at its present session proposals to improve the timeliness and response rate of data through the common questionnaire and the questionnaire on road traffic accident statistics (ECE/TRANS/WP.6/157, paragraph 57).

2. In order to alleviate the data gap and to seek further improvement in the availability and quality of transport statistics within UNECE, the secretariat has drafted a road map on collection and dissemination of transport statistics for the way forward.

II. Introduction

3. The aim of the present document is to review all work on data collection and dissemination carried out in the framework of the Working Party on Transport Statistics (WP.6) and to propose a set of recommendations to improve this activity.

4. The main objective is to reduce the reporting burden on countries by discontinuing the collection of data that are largely unavailable or irrelevant (e.g. in the case where no international comparison is possible). The comparability of transport statistics among

countries is of major importance, in particular concerning the strengthening of cooperation between agencies involved in collecting or providing transport data. Moreover, it is important to inquire as to whether a given collection exercise represents a duplication of efforts. The relevance of the data collection activities of the Inland Transport Committee should continuously be called into question to ensure that the collection of data is driven by user needs at national and international levels.

5. In the present document data availability is considered for each mode in order to identify where efforts are needed.

6. All aspects of the web dissemination are reviewed in particular: coverage of statistical areas, coverage of countries, level of detail, timeframe, value added /user needs, metadata, and functionality of the database.

7. Proposals and recommendations are made on how to streamline UNECE data collection and to improve dissemination. Detailed statistics on data availability referred to in the present road map are provided in document ECE/TRANS/WP.6/2010/9.

III. Data collection

A. Annual collection

8. The UNECE Transport Division currently collects annually about 1447 variables covering four modes of transport (rail, road, inland waterways, oil pipelines). Road represents 70 per cent of variables, rail 16 per cent, inland waterways 11 per cent and oil pipelines 3 per cent. Almost half of the collected data (47 per cent) are related to road traffic injury accidents. The other domains consist of: equipment (26 per cent), traffic (18 per cent), infrastructure (4 per cent) and economic performance (employment (4 per cent), investment (1 per cent)).

9. Data for road traffic injury accidents are mainly collected through a questionnaire circulated by UNECE. Other data are collected through the Common Questionnaire circulated jointly by UNECE, Eurostat and the International Transport Forum (ITF). Data referred to in the present document are data contained in the UNECE transport statistics database from 2001 to 2007. The availability of data is different from one country to another and depends considerably of the participation in the Web Common Questionnaire. Twelve countries are not yet registered for the use of online data collection (Andorra, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Iceland, Kyrgyzstan, Monaco, Montenegro, Turkmenistan and Uzbekistan). Others are registered, but do not yet provide data.

1. Road

10. Eurostat is collecting data on the basis of Council Regulation (EC) No 1172/98 on statistical returns in respect of the carriage of goods by road (mandatory for EU countries).

11. The Community Database on Accidents on the Roads in Europe (CARE) contains data on road accidents for EU countries according to Council Decision 93/704/EC of 30 November 1993 on the creation of a Community database on road accidents.

12. CARE is a disaggregated database at Community level containing detailed data on individual accidents. For some EU countries data are not yet available in CARE (Bulgaria, Lithuania, Romania and Slovenia). CARE is planning to include data from the new EU Members States, plus Norway and Switzerland.

13. The International Traffic Safety Data and Analysis Group (IRTAD) is a database for 29 OECD countries (of which 25 are UNECE member States). The Interstate Statistical Committee of the CIS (CIS-STAT) regularly publishes indicators on road statistics.

14. Only the UNECE transport statistics database is public, free of charge and covers all UNECE countries.

15. The Consolidated Resolution on Road Traffic (ECE/TRANS/WP.1/123) adopted by the UNECE Working Party on Road Traffic Safety (WP.1) underlines the importance of statistics for road safety.

16. Data on road fleet are relevant for the activities of the World Forum for Harmonization of Vehicle Regulations (WP.29) and its subsidiary bodies. Other road statistics are relevant for the work of the UNECE Working Party on Road Transport (SC.1) and the UNECE Working Party on Transport Trends and Economics (WP.5).

17. Road data consist of statistics on accidents (66 per cent), transport equipment (23 per cent), traffic and transport measurement (7 per cent), economic performance (employment (2 per cent), investment (1 per cent)) and infrastructure (1 per cent).

(a) *Road traffic injury accidents*

18. The questionnaire is very detailed with 679 indicators on the number of fatalities, injuries and number of injury accidents, with a breakdown by time of occurrence (month, day of the week, light condition, road surface condition) and surroundings (motorways, within/without built-up area). Some information is also collected on type of collision (accident between vehicle and pedestrian, with single vehicle, head-on collision between vehicles, rear end collision between vehicles, collision due to crossing or turning, collision at level crossings) with statistics on accidents involving heavy goods vehicles. Road casualties (fatalities and injuries) are also collected with the same breakdown. Some indicators on accidents under the influence of alcohol are included in the questionnaire.

19. The questionnaire was circulated until 2004 and data collected were satisfactory for major part of countries. In 2005, it was decided to have an Internet version of the questionnaire on road traffic accidents similar to the Common Questionnaire. As the finalization of this version was delayed for technical reasons, the secretariat circulated in 2009 an Excel version of the questionnaire for collecting 2005–2007 data. In addition, CARE secretariat provided part of the data for Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Italy, Luxembourg, Malta, Netherlands, Poland, Portugal, Spain, Sweden and the United Kingdom. However, data from CARE account for the time being for less than 25 per cent of the data requested.

20. For EECCA¹ countries, the availability of data was satisfactory before 2005, except for Tajikistan, Turkmenistan (57 per cent in 2002–2003) and Uzbekistan.

21. Data on road traffic safety are the most frequently downloaded from the UNECE online database (560 downloads per month in 2009).

22. The existing questionnaire gives a breakdown of victims by road users and age groups and then the breakdown of these entries by a classification driver/non driver broken down by age group. In order to simplify its structure and to delete redundant information on age (318 indicators) for which the rate of data availability is low, the Intersecretariat

¹ EECCA (Eastern Europe, Caucasus, Central Asia): Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Working Group (IWG) has proposed to streamline the questionnaire on road traffic injury accidents. The newly proposed structure is as follows:

- (a) Number of injury accidents (total), broken down:
 - (i) by type of road (motorways, inside built-up areas (by type of collision), outside built-up areas (by type of collision), unknown);
 - (ii) by month;
 - (iii) by day of the week (Monday through Thursday, Friday, Saturday, Sunday, unknown day of the week);
 - (iv) by light condition (daylight, darkness, twilight or unknown);
 - (v) by road surface condition (dry road surface, other (wet, icy, etc.));
 - (vi) by type of collision (between vehicle and pedestrian, single vehicle accident, etc.);
 - (vii) by number of road injury accidents involving heavy goods vehicles (by type of collision);
 - (viii) by number of injury accidents including road users (driver or pedestrian) under the influence of alcohol, drugs or medication.
 - (b) Number of killed/-Number of injured/-Number of casualties (total), broken down:
 - (i) by type of road (motorways, in built-up areas (by type of collision), outside built-up areas (by type of collision), unknown);
 - (ii) by month;
 - (iii) by day of the week (Monday through Thursday, Friday, Saturday, Sunday, unknown day of the week);
 - (iv) by light condition (daylight, darkness, twilight or unknown);
 - (v) by road surface condition (dry road surface, other (wet, icy, etc.));
 - (vi) by type of collision;
 - (vii) by road user and age group (pedestrian, cyclists, moped riders, etc.);
 - (viii) by gender;
 - (ix) by age group;
 - (x) by number of killed involving heavy goods vehicles (by type of collision);
 - (xi) by number of killed/injured/casualties under the influence of alcohol, drugs or medication.
23. The Working Party may wish to decide as follows:
- (a) Adopt a simplified version of the questionnaire as proposed by IWG in document ECE/TRANS/WP.6/2010/3;
 - (b) Request the secretariat to pursue collection of data from the CARE Database, possibly by establishing a Memorandum of Understanding with the CARE secretariat specifying the need for regular data transmission to UNECE;
 - (c) Request the secretariat to accelerate the finalization of the Internet version of the questionnaire on road traffic accidents;

(d) Request the secretariat to cooperate with IRTAD on issues of methodology and exchange of information.

(b) *Road transport equipment (vehicles)*

24. The questionnaire contains 239 indicators on road vehicles. Passenger road vehicles registered in each country are broken down into mopeds, motorcycles (by size of engine), passenger cars (by age and by type of motor energy and engine size and also by unloaded weight), and motor coaches, buses and trolley buses (by age and by type of motor energy (number and number of seats)). Data on goods road vehicles (lorries, trailers and semi-trailers) and road tractors are broken down by type of motor energy, by age, by load capacity and by kind of transport (operated for hire or reward, operated for own account).

25. Statistics on new registrations are collected for motorcycles, passenger cars (by type of motor energy and engine size and by unloaded weight), motor coaches, buses and trolley buses (by type of motor energy (number and number of seats), lorries, trailers and semi-trailers (by type of motor energy, by load capacity and by kind of transport), and road tractors (by type of motor energy and by kind of transport).

26. Data on road vehicles are essential for road safety policies and the breakdown of the number of vehicles by type of motor energy and size of engine is relevant for environmental policies and sustainable transport. Data on road vehicle fleet by type and age represent the second most popular download from the online database (about 200 downloads per month in 2009).

27. For EECCA countries and North America, the availability of data on road vehicles is very low. No data are available for Belarus, Bosnia and Herzegovina, Portugal (2003–2007), Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

28. The Working Party may wish to decide as follows:

(a) To invite, in particular EECCA countries, to transmit through the Common Questionnaire complete and timely data on road vehicles (including new registrations);

(b) To continue to collect data on all indicators relevant for environmental policies and sustainable transport (information by type of motor energy and engine size), irrespective of the data availability;

(c) To introduce a separate entry for trolley buses by splitting the existing entry “Motor coaches, buses and trolley buses”.

(c) *Road traffic and transport measurement*

29. The questionnaire contains 71 indicators on road traffic and transport measures. Data on road traffic include vehicle-km for all motor vehicles on national territory, irrespective of the country of registration, given by type of motor vehicles (motor cycles, passenger cars, motor coaches, buses and trolley buses, lorries and road tractors). The same data are collected for vehicles registered in the reporting country (vehicle-km).

30. Data on transport measurement give, for vehicles registered in the reporting country, the number of passengers-km by type of motor vehicle and the tonnage of goods by type of transport (national, international/loaded/unloaded, cross-trade, road cabotage) and by kind of transport (operated for hire or reward, operated for own account) (tones, tonne-km).

31. Statistics on national goods transport within the reporting country are also very detailed by kind of transport (tonne/tonne-km). More detailed information is available mainly for EU countries on international goods transport by country of embarkment/disembarkment.

32. Usually, the total of motor vehicle movements on national territory is available. However, the detail of road transport measurement is low for the majority of countries and sub-regions.

33. Almost no data are available for Albania, Bosnia and Herzegovina, Greece, Luxembourg, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.

34. The Working Party may wish to decide as follows:

(a) Delete from the questionnaire the breakdown by country of origin/destination as this information is available for only a limited number of countries;

(b) Pursue work towards harmonization of methodologies on vehicle-km.

(d) *Economic performance*

35. The questionnaire contains 20 indicators on road employment. The number of goods road transport enterprises (GRTE) is given by number of employees in the enterprise and by number of road motor vehicles. The number of employees is broken down by gender. Data are collected only for goods road transport enterprises and not for passenger enterprises. These data are missing for almost the half of member States (Andorra, Armenia, Belarus, Belgium, Bosnia and Herzegovina, Canada, Georgia, Greece, Ireland, Israel, Italy, Luxembourg, Monaco, Netherlands, Portugal, Romania, Russian Federation, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan).

36. Six indicators on investments provide the annual amount for the year of investment and maintenance expenditure in road transport vehicles and in infrastructure by nature of expenditure (investment, maintenance). Only Cyprus and Poland submitted complete information on road investment. Partial data are available for Albania, Austria, Azerbaijan, Croatia, Czech Republic, Denmark, Estonia, France, Hungary, Iceland, Ireland, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Switzerland, The former Yugoslav Republic of Macedonia, United Kingdom and the United States of America.

37. The Working Party may wish to decide as follows:

(a) Analyze and decide on the collection of data on economic performance of road passenger enterprises as, at present, only data on road goods transport enterprises, are collected;

(e) *Road Infrastructure*

38. The questionnaire contains six indicators on road infrastructure: length of motorways (and E-Roads) and other roads by category of road (state, provincial, communal). The distinction between provincial and communal roads does not seem to be very useful, as some countries have difficulties with this break down.

39. No data are available for Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Data on motorways are missing for Canada and the majority of EECCA countries; however data on main Asian roads in EECCA are published on the ESCAP website.

40. The Working Party may wish to decide as follows:

(a) Delete the breakdown by State roads/Communal roads/Provincial roads and to keep only the total of roads;

(b) Request the secretariat to search for mechanisms to improve the availability of data on road infrastructure;

(c) Request the secretariat to cooperate closely with the ITF on data collection in the field of investments and maintenance for road infrastructure.

2. Rail

41. Eurostat is collecting data on the basis of Council Regulation (EC) No 91/2003 on rail transport statistics as amended (mandatory for EU countries). The CIS-STAT is also regularly publishing some indicators on rail statistics.

42. The International Union of Railways (UIC) is collecting and publishing data on rail statistics containing among others transport stock, passenger traffic, freight traffic, accidents and high-speed. The coverage is limited to UIC members.

43. The Organization for Co-operation between Railways (OSJD) is also collecting data from their 25 members (of which 20 belong to the UNECE).

44. Only the UNECE transport statistics database is public, free of charge and covers all UNECE countries with rail systems.

45. Data on rail are relevant for the activities of the UNECE Working Party on Rail Transport (SC.2), the UNECE Working Party on Intermodal Transport and Logistics (WP.24) and the UNECE Working Party on Transport Trends and Economics (WP.5).

46. The Working Party SC.2 included in its programme of work an activity to “periodically survey passenger and goods traffic on the AGC network in order to provide support for transport planning” (ECE/TRANS/2010/08).

47. Data on rail include statistics on traffic (51 per cent), equipment (26 per cent), infrastructure (16 per cent) and economic performance (employment (4 per cent) and investment (3 per cent)).

(a) *Rail traffic and transport measurement*

48. Statistics on traffic and transport measurement account for half of all data on rail. Data on traffic include train movements (train-km), passenger-train-movements (train-km), goods-train-movements (train-km) and other train-movements.

49. Same statistics are collected for tractive vehicle movements, hauled vehicle movements (for passengers and goods). All data are broken down by type of motor vehicle and source of power (electric, diesel, steam).

50. Data on transport measurement give the number of passengers (and passenger-km) by type of transport (national, international) and by class (class I, class II). It includes also the number of accompanied passenger cars by type of transport (national, international/loaded/unloaded, transit). Statistics on goods transport are also very detailed (number of tonnes) by type of consignment (full train load, full wagon load, small loads) at national (by range of distance moved, tonnes/tonnes-km) and international levels (load, unload, transit).

51. More detailed information is available mainly for EU countries on international passengers and goods transport by country of embarkment/disembarkment or loading/unloading.

52. The rate of availability of data on rail traffic is very high for some countries: Belgium, Croatia, Czech Republic, Finland, France, Hungary, Israel, Latvia, Poland, Slovenia and Sweden. However, almost no data are available for Belarus, Ireland and Norway (2002–2007), Tajikistan, Turkmenistan, United Kingdom, Ukraine and Uzbekistan.

53. The Working Party may wish to decide as follows:

- (a) Delete from the questionnaire the breakdown by country of origin/destination as this information is available for only a limited number of countries;
- (b) Request the secretariat to cooperate closely with OSJD and UIC with a view to avoiding, to the extent possible, duplication in the collection of data.

(b) *Rail transport equipment*

54. The questionnaire contains 59 indicators on rail transport equipment and includes locomotives and railcars (by source of power), passenger railway vehicles by type of vehicle (coaches, passenger railcars and railcar trailers), category of vehicle (class I, class II, mixed, dining cars, couchette coaches, sleeping cars) and by category of seats or berths. It includes also the number of vans and wagons by type of wagon (covered, high sided, flat, other) and the number of principal railway enterprise wagons and privately owned wagons by type of wagon.

55. Data on rail equipment are broken down by type of wagon ownership (principal railway enterprise wagons, privately owned wagons). As the rail ownership is changing considerably in recent years, IWG proposed to discontinue the collection of information on ownership.

56. Very few data are available for Belarus, Georgia, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine, Uzbekistan (2002-2007). Data are completely missing for Armenia, Bosnia and Herzegovina, Ireland, Norway and Switzerland.

57. The Working Party may wish to decide as follows:

- (a) Discontinue the collection of data on the ownership of rail equipment;
- (b) Request the secretariat to cooperate closely with OSJD and UIC with a view to avoiding, to the extent possible, duplication in the collection of data.

(c) *Rail infrastructure*

58. The 36 indicators on rail infrastructure provide data on the length of tracks (by type of traction), the length of lines by number of track (single, double or more), track gauge (standard, large), nature of traffic (passenger, freight, passenger and freight), and electrified/non electrified.

59. Special efforts are needed to fill data gaps, in particular for the following countries: Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Ireland, Kazakhstan, Kyrgyzstan, Luxembourg, Norway, Portugal, Switzerland, Tajikistan, Turkmenistan, Ukraine, United Kingdom, United States of America and Uzbekistan.

60. The Working Party may wish to decide as follows:

- (a) Request the secretariat to cooperate closely with OSJD and UIC with a view to avoiding, to the extent possible, duplication in the collection of data.

(d) *Economic performance*

61. The 10 indicators on rail employment include data on the number of employees by gender, by type of employment (operating and traffic, traction and rolling stock, ways and works) and number of employees in general administration. Data availability is low for the following countries: Armenia, Belarus, Bosnia and Herzegovina, Georgia, Ireland, Netherlands, Norway, Portugal, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.

62. The six indicators on investment provide data on the annual amount of investment and maintenance expenditure in rolling stock and in infrastructure by nature of expenditure (investment, maintenance). Data availability varies from one country to another. Efforts are needed for the collection of data in particular from Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Ireland, Kazakhstan, Luxembourg, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Switzerland, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

63. The Working Party may wish to decide as follows:

(a) Request the secretariat to cooperate closely with OSJD and UIC with a view to avoiding, to the extent possible, duplication in the collection of data.

(b) Request the secretariat to cooperate closely with the ITF on data collection in the field of economic performance of railways.

3. Inland Waterways (IWW)

64. Eurostat is collecting data on the basis of Council Regulation (EC) No 1365/2006 on statistics of goods transport by inland waterways that repeals Council Directive 80/1119/EC (mandatory for EU countries).

65. The Rhine (CCNR) and Danube (DC) Commissions are collecting and publishing data on inland waterways containing among others information on fleet and traffic. Their coverage is limited to their members.

66. The CIS-STAT is also regularly publishing some indicators on inland waterways statistics.

67. Data on inland waterways could be used in the activities of the UNECE Working Party on Inland Water Transport (SC.3), the UNECE Working Party on Intermodal Transport and Logistics (WP.24) and the UNECE Working Party on Transport Trends and Economics (WP.5).

68. The Working Party SC.3 included in its programme of work an element on “preparation and circulation of studies on the situation and trends in inland navigation in order to provide Governments with up-to-date basic information and data concerning inland water transport mode” (ECE/TRANS/2010/08).

69. Data on inland waterways consist of statistics on traffic (51 per cent), equipment (26 per cent), infrastructure (16 per cent) and economic performance (employment (4 per cent) and investment (3 per cent)).

(a) *Inland Waterway Transport equipment*

70. The 77 indicators on IWW equipment include data on the number of self-propelled vessels, dumb and pushed vessels (by carrying capacity and by year of construction) and the number of tugs and pushers (by year of construction). An update of age classes for the fleet may be necessary.

71. Data availability is low for Austria, Canada, Germany, Netherlands, Ukraine and the United States of America.

72. The Working Party may wish to decide as follows:

(a) Amend the existing breakdown for the age of vessels by replacing “1990 and over” with two entries: “1990–1999” and “2000 and over”;

(b) Request the secretariat to cooperate closely with CCNR and DC on data collection in the field of inland waterway transport equipment.

(b) *Traffic and transport measurement*

73. Statistics of goods transported on national territory by all vessels irrespective of the country of registration are broken down by type of transport (national, international /loaded/unloaded, transit), by type of propulsion (push/tow, self propelled) and by distance moved (in tonne/tonne-km). In some cases, data on international goods transport show information by country of loading/unloading.

74. For transport on the Rhine at the German-Dutch frontier (Emmerich-Lobith), data are available in tonnes by type of propulsion upstream and downstream.

75. The rate of data availability is very high for the Rhine, except for Belgium where only around 30 per cent of data are provided). Data availability is low for the Russian Federation and Ukraine.

76. The Working Party may wish to decide as follows:

(a) Delete from the questionnaire the breakdown by country of loading/unloading;

(b) Request the secretariat to cooperate closely with CCNR and DC on data collection in the field of traffic and transport measurement for inland waterway transport.

(c) *Economic performance*

77. The 23 indicators on economic performance provide data on the number of goods inland waterways transport enterprises and the carrying capacity of their vessels are given by number of vessels of the enterprise. The number of employees is broken down by gender and by number of vessels of the enterprise.

78. No data is available for Canada, Netherlands, Romania, Russian Federation and Ukraine. The rate of data availability is low for Germany, Hungary, Kazakhstan, Kyrgyzstan and the United States of America.

79. Data 6 indicators on investments provide annual amounts of investment and maintenance expenditure in inland waterways transport infrastructure broken down by nature of expenditure (investment, maintenance).

80. No data are available for Belgium, Bulgaria, Canada, Croatia, Germany, Kazakhstan, Kyrgyzstan, Netherlands, Romania and Ukraine.

81. The Working Party may wish to decide as follows:

(a) Request the secretariat to cooperate closely with CCNR and DC on data collection in the field of economic performance of inland waterway transport.

(b) Request the secretariat to cooperate closely with the ITF on data collection in the field investment and maintenance for inland waterways infrastructure.

(d) *Inland Waterways Transport Infrastructure*

82. The 17 indicators on IWW infrastructure provide data on the length of navigable inland waterways, canals, navigable rivers and lakes by carrying capacity of vessels.

83. Efforts are needed to improve data availability, in particular for Bulgaria, Canada, Czech Republic, Kazakhstan, Kyrgyzstan, Netherlands, Poland, Russian Federation, Ukraine, United Kingdom and the United States of America.

84. The Working Party may wish to decide as follows:

(a) Analyze the present breakdown on IWW transport infrastructure and decide on new indicators, if appropriate;

(b) Request the secretariat to cooperate closely with CCNR and DC on data collection in the field inland waterways transport infrastructure.

4. Oil pipelines

85. Data on oil pipelines include statistics on traffic (77 per cent), employment (10 per cent), investment (8 per cent) and infrastructure (5 per cent).

(a) *Traffic and transport measurement*

86. The 30 indicators on transport measurement and traffic through pipelines within national territories provide detailed data by type of transport operation (national, international, transit) for refined petroleum products and crude petroleum (tonne/tonne-km).

87. Traffic data are complete for the Czech Republic, Hungary, Latvia and Lithuania. They are largely missing for Belarus, Canada, Turkmenistan, the United States of America and Uzbekistan.

88. The Working Party may wish to decide as follows:

(a) Verify user needs for these data and decide on the streamlining of these data, as appropriate;

(b) Analyze the present breakdown on traffic and transport measurement and decide on new indicators, if appropriate.

(b) *Economic performance*

89. The 4 indicators on employment consist of data on the number of oil pipeline enterprises and a breakdown of employment by gender. No data are available for Belarus, Denmark, Germany, Netherlands and Turkmenistan.

90. The 3 indicators on investments provide data on the annual amount of investment and maintenance expenditure in oil pipelines infrastructure by nature of expenditure (investment, maintenance).

91. Data on investment are complete for Croatia, Czech Republic, Latvia and Lithuania. No data are available for Albania, Bulgaria, Canada, France, Germany, Kazakhstan, Netherlands, Poland, Romania, Spain, United Kingdom, the United States of America and Uzbekistan.

92. The Working Party may wish to decide as follows:

(a) Verify user needs for these data and decide on the streamlining of these data, as appropriate.

(c) *Infrastructure*

93. Data on infrastructure are limited to 2 indicators on the length of pipelines operated and their carrying capacity (in tonnes/day).

94. Data on infrastructure are complete for Bulgaria, Czech Republic, Latvia, Lithuania, and Norway. No data are available for Belarus, Netherlands, Turkmenistan, Ukraine and Uzbekistan.

95. The Working Party may wish to decide as follows:

(a) Verify user needs for these data and decide on the streamlining of these data, as appropriate.

B. Quinquennial traffic censuses

1. E-Road Traffic Census

96. The E-Road Traffic Census is performed every 5 years in order to obtain data for improving and developing the E-Road system in conformity with the standards set out in Annex II to the European Agreement on Main International Traffic Arteries (AGR) of 1975 (ECE/TRANS/16 and Amends.1–9).

97. The E-Road Traffic Census, carried out under the auspices of UNECE, is the only existing international framework providing comparable data on traffic flows on main European roads on a pan-European basis.

98. The E-Road Traffic Census enables improved land use management and better integration of road traffic in the planning processes of the country itself and also at the international level, allowing for adequate maintenance, renewal and improvement programmes. This information also contributes to finding solutions to traffic congestion and facilitates the study of environmental issues, road safety and energy consumption.

99. In addition, the census is used for the measurement of the vehicle performance of the road network (expressed in vehicle-kilometres) and for information on the volume of night traffic, holiday traffic and peak-hour traffic on the E-Road network.

100. The main indicator used is the average annual daily traffic flow (AADT). Each country should provide data in eight tables:

- (a) Length of E-Roads by width and number of carriageways and lanes;
- (b) Length of E-Road sections by average annual daily traffic (AADT);
- (c) Counting posts on E-Roads;
- (d) Distribution of motor traffic by vehicle category;
- (e) Length and usage of roads;
- (f) Symbols to be used for the presentation of results of the E-Road Traffic Census and data to be given on maps with respect to counting posts;
- (g) Motor traffic density data at counting posts on E-Roads shown on the accompanying map; and
- (h) Status of E-Road Signposting as of the end of the year of the census.

101. The following countries provided data (totally or partially) for the 2005 E-Road Census: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Republic of Moldova, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine and United Kingdom.

102. The Working Party may wish to decide as follows:

- (a) Invite all UNECE member countries to participate in the 2010 E-road traffic census in compliance with ITC Resolution No. 259 and to transmit relevant data to the UNECE secretariat within the stipulated time frames;
- (b) Request the UNECE secretariat to publish the census data on the web immediately following their compilation, if possible using geographical information systems (GIS) technology.

2. E-Rail Traffic Census

103. The E-Rail Traffic Census was undertaken for the first time in 2005 and organized jointly by UNECE and Eurostat in order to avoid duplication, as EU member States have to do a rail census which is based on Council Regulation No. 91/2003 of 16 December 2002 on rail transport statistics.

104. Internationally comparable data on main international railway traffic lines are of major and increasing importance in Europe, given the growing volume of international and transit traffic.

105. Data collected include data on the number of trains, train-kilometres and infrastructure. The rail network to be considered for the census consists of:

(a) Lines that are included in annex 1 of the European Agreement on Main International Railway Lines (AGC) of 1985 as amended;

(b) Lines that are included in the European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) of 1991 as amended; and

(c) In the European Union countries, lines in the Trans-European rail network (TEN).

106. For each E-railway line in a country, the annual number of trains should be given per network segment, by direction and by train category.

107. Governments are requested to submit also information on the technical characteristics of the rail network (track gauge, length in km, number of tracks, type of current (AC/DC) and voltage if the segment is electrified).

108. Each country should provide data in seven tables:

- (a) Goods train movements per year;
- (b) Passenger train movements per year;
- (c) Other train movements (service trains, etc.) per year;
- (d) Train-kilometres per year;
- (e) Technical characteristics of the rail network segments in 2010;
- (f) Geographical co-ordinates of the rail network segments; and
- (g) Description of variables.

109. The following countries provided data (totally or partially) for the 2005 E-Rail Census: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

110. The Working Party may wish to decide as follows:

(a) Invite all UNECE member countries to participate in the 2010 E-rail traffic census in compliance with ITC Resolution No. 260 and to transmit relevant data to the UNECE secretariat within the stipulated time frames;

(b) Request the UNECE secretariat to publish the census data on the web immediately following their compilation, if possible using geographical information systems (GIS) technology;

(c) Request the UNECE secretariat to cooperate with Eurostat in the preparation of the E-rail traffic census and necessary follow-up.

IV. Data dissemination

A. Web

1. Coverage of statistical areas

111. The UNECE Transport Statistics Database covers the following topics: road traffic injury accidents, road traffic, road vehicle fleet, railway traffic, railway vehicles, railway employment, inland waterway traffic, inland waterway vessels, transport infrastructure and oil pipelines transport. Each topic includes several tables.

2. Coverage of countries

112. The database consists of data from all UNECE countries. However data availability varies considerably among countries as indicated in detail in the previous section.

3. Level of detail

113. Data on road traffic injury accidents are well disaggregated. Road safety indicators represented 39 per cent of downloads followed by data on traffic (29 per cent), fleet (23 per cent) and infrastructure (8 per cent).

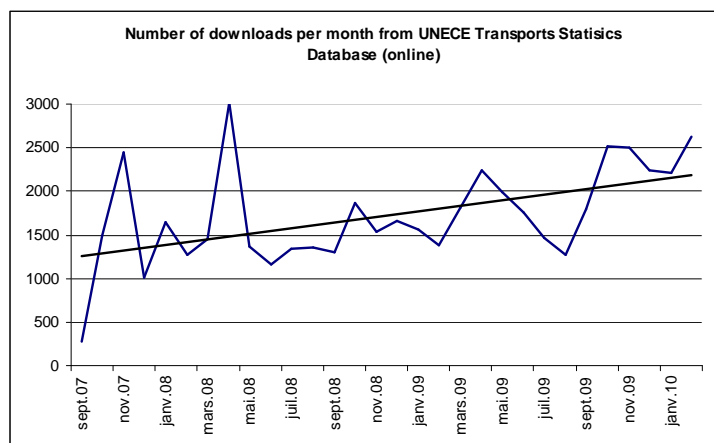
114. The most popular indicator is “Number of Persons Killed or Injured in Road Accidents” with an average of 310 downloads per month, followed by “Road Vehicle Fleet by Type and Age” (190 downloads per month) and “Road Infrastructure at 31 December” (115 downloads per month).

4. Time series

115. Online data are available from 1993.

5. Value added/User needs

116. The UNECE Transport Statistics Database provides information that cannot be obtained from publicly available databases of other international organizations. The availability of data from 2005 to 2008 increased substantially in the fourth quarter of 2009 after importing data from the Common Questionnaire and, in case of road safety data, from the CARE Database. The number of downloads from the UNECE Transport Statistics Database increased regularly since September 2007 (see graph below). In 2009, the number of downloads has increased by 19 per cent reaching 22 551 downloads.



117. A user survey of the UNECE statistical database (including transport statistics database) was undertaken between 17 September and 22 November 2009 and revealed that:

- (a) Over 84 per cent of respondents rated the overall quality of data as good or excellent;
- (b) Over 78 per cent of respondents thought that the usability of the database web site was good or excellent;
- (c) 40 per cent of respondents found information in the database to be highly relevant to their needs, whilst 55 per cent found it to be partly relevant;
- (d) 77 per cent of respondents were satisfied with the timeliness of data and 91 per cent were satisfied with the metadata provided.

118. The users of transport statistics according to the survey were as follows:

Users of transport statistics	
Official of a national statistical office	10.81 %
Official of another national or local government department or agency	2.70 %
Official of an international organization or a non-governmental organization	5.41 %
Academic or researcher	54.05 %
Student	8.11 %
Journalist or other media worker	2.70 %
Owner or employee of a private business	13.51 %
Private individual	2.70 %
Total	100 %

6. Metadata

119. Metadata available in the UNECE Transport Statistics Database include: data source, definitions and specific country information regarding the data. A glossary of definitions is provided on the UNECE Transport website

7. Functionality of the UNECE Transport Statistics Database

120. The UNECE Transport Statistics Database is easy to use. Data can be easily downloaded in several formats (excel, csv, txt, htm, etc.).

121. The Working Party may wish to decide as follows:

- (a) Request the UNECE secretariat to improve quality and scope of the UNECE Transport Statistics Database, including the provision of appropriate metadata;
- (b) Request the UNECE secretariat to provide, to the extent possible, all relevant information in the UNECE Transport Statistics Database in Russian;
- (c) Request the UNECE secretariat to disseminate online transport related indicators, such as:
 - (i) performance of freight transport (tkm);
 - (ii) performance of passenger transport (pkm);
 - (iii) fatalities/injuries per million inhabitants;
 - (iv) fatalities/injuries per number of vehicles;
 - (v) passenger cars in use per 1000 inhabitants;
 - (vi) roads density (km per 1000 km²);
 - (vii) railway density (km per 1000 km²).

B. Publications

122. At present, the 3 recurrent publications of the UNECE secretariat are:

- (a) Annual Bulletin of Transport Statistics for Europe and North America (ABTS);
- (b) Statistics for Road Traffic Accidents in Europe and North America (RAS);
- (c) Main transport indicators in the UNECE region.

123. These publications provide detailed transport information which is not yet available online. They contain also more methodological notes and metadata. Unfortunately, since 2005, the UNECE secretariat was not in a position to publish the ABTS and the RAS on an annual basis. This was due to an increasing delay in the availability of the required country data and inadequate secretariat resources to cope with these increasing difficulties. As of 2004, the ABTS and the RAS were no longer published in hard copy, but only in electronic format.

124. Since 2009, the UNECE secretariat publishes a “flyer” on main transport indicators in the UNECE region that is available in February for the annual session of the UNECE Inland Transport Committee (ITC). It also covers data related to the annual theme of the policy segment of ITC (intermodal transport in 2009; inland waterways in 2010). Data are updated each year in April/May for the annual session of the Working Party.

125. The Working Party may wish to decide as follows:

- (a) Request the UNECE secretariat to issue the Annual Bulletin of Transport Statistics for Europe and North America (ABTS) and the Statistics for Road Traffic Accidents in Europe and North America (RAS) only as and when adequate data are available. The ABTS will become the “UNECE Transport Statistics for Europe and North America”.
- (b) Request the UNECE secretariat to continue the annual publication of the “Main Transport Indicators in the UNECE region”.

V. General recommendations

126. UNECE as a pan-European organization aims to make available for its 56 member States a common forum. It also provides a link between the 27 countries of the European Union and the other UNECE countries in Eastern and South-Eastern Europe, Central Asia and the Caucasus as well as with the countries in North America and Israel. The collection and dissemination of comparable data and indicators on transport and road traffic safety therefore needs to be pursued within this objective. This requires the continuing provision of comparable, high-quality and up-to-date data and indicators in line with user needs keeping also in mind the requirements of the UNECE inter-governmental bodies under the auspices of the Inland Transport Committee.

127. Since transport and road traffic safety data are already well established and standardized within the EU due to the excellent work undertaken by Eurostat, particular efforts are required by UNECE to ensure a level playing field in this important area for a wider Europe and with North America. The methodological work undertaken by the Working Party and more recently the web-based Common Questionnaire on Transport Statistics has provided the necessary basis and instruments to allow this. Yet they remain to be applied by all UNECE member States, particularly those in Eastern Europe, Central Asia and the Caucasus (EECCA). This is the challenge in the coming years.

128. An important step in this respect is the translation of all information, metadata and instructions for the application of the Common Questionnaire in Russian. Another important element is capacity building, particularly in EECCA countries to allow experts in statistical offices and other national authorities to become familiar with this important web tool and use its mechanisms for the transmission of data to the UNECE secretariat. As a first step, in 2010 UNECE plans to organize a regional workshop in Central Asia on the application of the Common Questionnaire. Further national and regional workshops or seminars are envisaged.

129. The Working Party may wish to decide as follows:

(a) Continue to streamline data collection procedures in the field of transport and road traffic safety and to review user needs on a permanent basis, including those of other UNECE inter-governmental bodies;

(b) Request the UNECE secretariat to pursue its efforts to provide high-quality and up-to-date data and indicators on transport and road traffic safety;

(c) Request the UNECE secretariat to cooperate with international organizations and national offices, in particular Eurostat, ITF, UIC, OSJD, CCNR and DC towards harmonization of methodologies and streamlining of data collection procedures;

(d) Request the UNECE secretariat to put in place a coordinated approach with other international organizations in the collection of transport and road traffic safety data, possibly by establishing a calendar of action to be kept on a continuing basis.

(e) Support the UNECE secretariat in the organization of capacity building events in the collection of transport and road traffic safety statistics, particularly for EECCA countries and invite national statistical offices and other authorities as well as international organizations to assist UNECE in these activities through in-kind or financial contributions.