Transport statistics availability and Data Collection Improvements

Note by the secretariat

I. Background

1. The United Nations Economic Commission for Europe (UNECE) disseminates data through two biennial publications (Inland Transport Statistics for Europe and North America and Statistics of Road Traffic Accidents in Europe and North America), through the annual production of Transport Statistics Infocards in advance of the annual session of the Inland Transport Committee (ITC), and through regular updates to its online transport statistics database (w3.unece.org/PXWeb/en). The data for each is collected through the Web Common Questionnaire (WebCoQ), specialized questionnaires sent to countries, and from existing data collected by partner organizations (e.g. road safety data from the CARE database). The disseminated products are updated on a regular basis, with the most up-to-date data always found in the online database.

2. Since the most recent session of the Working Party, the Statistics of Road Traffic Accidents for Europe and North America publication was produced and disseminated and the Infocards were similarly disseminated online in January 2020 and December 2019, respectively. Inland Transport Statistics for Europe and North America will be published in late 2020. The online database was updated through the year and previous efforts of the secretariat to improve the quality and availability of the data disseminated were continued.
II. Better Road Accident Data Improvements in 2019

3. While preparing the Road Accidents publication in the Summer of 2019, the secretariat made a renewed effort to obtain data for every single ECE member State, through additional reminders and telephoning statistics offices where necessary. As a result of this, 55 of the 56 ECE member States provided a road accident fatality figure for the year 2017, which is likely the most complete the database has ever been. In order to have a complete 2017 dataset, some top-level data for European countries that were not yet available through the CARE database were taken from the road accident module of the Web Common Questionnaire. In previous years the webcoq data (that are provided earlier) have agreed completely with those from the CARE database, so mixing sources in this way does not seem to affect data quality. In addition to the very complete 2017 data, 39 member States showed data for 2018 as well, allowing insights into the very latest trends in road accident figures.

4. In addition to this better top-level data, more detailed data have become available for countries covered by the CARE database, collated by the European Commission. Through improved coordination between Eurostat and the secretariat, road traffic fatalities and injuries broken down by type of user (driver, pedestrian etc.), and the breakdown by age and gender of these were made available in December 2019. This means that for example the number of pedestrians killed in road traffic accidents is now available for 44 out of 56 member States. Naturally, this type of detailed breakdown is hugely important for identifying best policy tools for road safety improvements, and also responds to the demand in the 2030 Agenda for Sustainable Development to ensure that no-one is left behind.

III. Questionnaire Streamlining

5. The Inter-secretariat Working Group, consisting of the ECE secretariat, Eurostat and the International Transport Forum, are aware of the reporting burden of the Web Common Questionnaire, and streamlining of the reporting requirements is always considered. In these considerations the balance between reducing reporting burden and having detailed, useful data is always considered. At the previous session of the Working Party, the secretariat prepared a very modest proposal for streamlining for informal discussion of the meeting. The proposal focussed on indicators to streamline that a majority of countries would be likely to support: indicators that were not currently published by any of the organisations; indicators that had previously been considered for deletion (yet for unknown reasons these changes had not been implemented); and indicators with poor data availability and analytical use despite being collected for a number of years.

6. Examples of some of these indicators were the optional breakdown of passenger cars by fuel type between liquefied natural gas and compressed natural gas (considered too detailed and unimportant); bus and coach vehicle-km, the numbers of journeys offered and the number of seat-km offered (these indicators were only available for a handful of countries despite being requested for ten years); and the entire gas pipeline module of the questionnaire (which had been requested for eight years but none of the three organisations had yet disseminated these data).

7. These indicators were thus presented at the previous session of the Working Party for consultation. The reaction was broadly positive, but the IWG felt it important to do consult on this further. Thus these proposals were formalised by Eurostat, and before the Eurostat meeting in November 2019 countries were explicitly asked if these indicators could be suppressed. The results were overwhelmingly positive, and so as of 2020 these indicators will be removed from the common questionnaire system.
8. The IWG is open to repeating this exercise in 2020, as long as proposed indicators have a very good reason for suppression (see above) in addition to being considered of limited use by data users.

Documentation
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IV. Continued data validation

9. The secretariat has also improved the quality of disseminated data through continued data validation since the Working Party’s previous session. An algorithm for detecting outliers in the current online database is used periodically to identify combinations of countries and indicators for which time series are erratic. A new internal tool is also now available to visualize these possibly anomalous data for easier identification.

10. To address data quality issues prior to dissemination, the secretariat uses a data validation workbook which conducts sum checks and provides an easier visual country-by-country check of data for analysis when uploading data from WebCoQ. This improves data quality by helping to identify potentially incorrect data prior to dissemination on the secretariat website.

11. While transport data disseminated by the secretariat, Eurostat and the International Transport Forum (ITF) all use WebCoQ as the primary source, differences remain between the three organizations due to supplementary questionnaires and/or different treatment of WebCoQ data prior to dissemination in their respective websites and statistical publications. In January 2019, the secretariat began working together with the ITF to harmonize disseminated data where possible and understand differences in the scope of collected data where they exist. This collaboration will be ongoing with an initial focus on recent data and indicators required for the measurement of the Sustainable Development Goals.

12. After identifying indicators requiring follow-up through each of the validation methods noted above, the secretariat, in collaboration with the ITF and Eurostat, contacts countries on an annual basis with specific questions on unusual time series to either correct or better understand breaks in data series. Based on responses, the secretariat updates the relevant data in the database or adds footnotes as necessary. The most recent follow-up exercise was conducted in February 2019. As of 2020 Eurostat has been conducting extensive data validation of countries that report data to them.

Documentation
ECE/TRANS/WP.6/2019/10

V. Future work

13. The secretariat will continue to work to improve its data dissemination and review its methods to find areas for improvement. The IWG will continue to consider how best to minimise the reporting burden of the questionnaire, and the Working Party is requested to provide any suggestions for future improvements.