Common questionnaire: quality improvement

Note by the secretariat

I. Background

1. The common questionnaire allows countries to simultaneously provide inland transport statistics to three organizations – the Economic Commission for Europe (ECE), International Transport Forum (ITF) and the Statistical Office of the European Union (Eurostat). This exercise provides a rich collection of indicators, most of which are not available through other data collections at the international level. The principal methodological document for this collection is the Glossary for Transport Statistics,\(^1\) jointly published by the three organizations, the fifth version of which was finalized in 2019.

2. This document discusses some common quality issues with data collected through the common questionnaire, to identify areas where quality can be improved by member States and the partner organizations working together. The document is organized by theme, with a description of the issue and a proposal for actions to be taken. Further detail will be provided at the annual session.

II. Load capacity of road vehicles

3. In the road chapter of the questionnaire, there are 362 indicators requested, and vehicle equipment makes up 275 of these. Of these, 32 indicators relate to the load capacities of goods vehicles (based on both the total fleet number and new registrations in the reference year), where the unit is tonnes of load capacity. For these indicators, it seems that some countries have been consistently supplying the number of vehicles, rather than their carrying capacity, and there are unit problems for other countries. While the partner organizations all conduct quality checks on all common questionnaire indicators, likely errors in this set of indicators have sometimes gone unnoticed because checks typically focus on internal

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consistency and trends over time, rather than on values relative to other characteristics (i.e., number of vehicles in this case).

4. The issue seems to exist for all 32 indicators, but to give an example of compliance member States are reminded that len... The partner organizations. For example, there has been confusion for the road transport. There are a... Taking this analysis further, the ratio of road traffic of motor vehicles... The partner... Other issues... also say that some lines are double tracked or greater. These countries... generally, member States may wish to discuss if it is worth keeping the load capacity indicator in the common questionnaire, given it has had issues for many years for several countries, and that the data correlate strongly with the number of goods vehicles.

III. Rail lines and tracks

7. Some countries have provided lengths of tracks equal to their lengths of lines, despite the fact that they also say that some lines are double tracked or greater. These countries include Bosnia and Herzegovina (2019), Belarus (2021), Georgia (2016), and Ukraine (2019). Conversely, in 2021, Montenegro report different lengths of tracks and lines and yet all of their lines are declared to be single track.

8. The partner organizations have a new plausibility check is conducted to ensure that track length is always greater than line length unless all lines are singular.

IV. Road traffic of motor vehicles

9. The road transport vehicle-kilometres chapter was developed several years ago as a pilot collection, from the 2008 year onwards. When this occurred, no attempt was made to streamline the existing road chapter, resulting in ten repeated indicators (despite slightly different language used between the two chapters).

10. The partner organizations propose that given the overlap between the two datasets, when data are provided in one chapter but not the other, the data are to be repeated (as the different chapters of the questionnaire feed into different dissemination cubes).

V. Other issues

11. There are a few other indicators that are often misunderstood and thus countries provide incorrect data or data in wrong unit. For example, there has been confusion for the length of ‘motorways’, as some countries would provide values for their full road network. In addition, some countries have repeatedly provided data in wrong unit for ‘passenger-km’ and ‘goods transport on national territory for vessels’. Also, some countries provide the value 0, when data is not available, and the value is unknown. This issue has been observed across several indicators. The missing values should always be left blank.

12. Member States are reminded that for data validation purposes, they should submit all corrections to their data themselves, through the Edamis system (see ECE/TRANS/WP.6/2021/7 for a description of the process). This allows all three
organizations to have harmonized data and means that all data published are directly from official country sources.

VI. Concluding remarks

13. The partner organizations will continue their efforts to improve data quality, in continuous liaison with member States. Statistical contacts are reminded of the importance of where possible following definitions from the Glossary, and of including metadata descriptions in all cases where this is not possible. A majority of common quality errors continue repeatedly over new data collection cycles. It would be helpful if countries note common quality issues relevant to their countries and pay extra attention to those indicators when providing the data in the following years. Further, many common questionnaire contacts are also data users themselves, and sharing any observations on quality with their respective organization allows more of these kinds of analyses to be conducted.