



Economic Commission for Europe**Inland Transport Committee****Working Party on Transport Statistics****Seventy-second session**

Geneva, 9–11 June 2021

Item 2 of the provisional agenda

Big data for transport statistics**Informal Webinars on new Mobility Monitoring****Note by the secretariat***Summary*

This document describes ongoing secretariat work, together with the International Transport Forum, on organising webinars on new mobility data sources, and how to take this work forward.

I. Background

1. Transport statistics at the international level has traditionally focussed on annual data based on official verified statistics, submitted to international organisations (such as the Economic Commission for Europe (ECE), International Transport Forum (ITF) and Eurostat) in the form of annual questionnaires. These data therefore are subject to a publication time lag of around fifteen months. With COVID-19 having dramatically affected mobility in virtually every country in the ECE region, since 2020 a new focus in many member States has been on shorter-term data than this, with many countries producing monthly, weekly or even daily data series for the first time. With multiple lockdowns and cycles of reopening likely to continue to disrupt transport patterns for the foreseeable future, this area of work will likely remain a prescient topic.

2. The way that transport patterns are monitored has also changed, a requirement given that traditional survey data would be too slow to provide data with a short time lag. Member States have incorporated mobility network operator data, traffic sensors and other new data sources, in order to match the required timeframe. While these new data sources provide huge potential, there remain questions as to their accuracy, completeness, and sustainability (in terms of maintaining statistical production into the future).

3. At the informal session of the Working Party in 2020, multiple countries presented their activities in this regard. Countries that presented were Canada, Czechia, Finland, Ireland, Netherlands, Russian Federation, Sweden, United Kingdom of Great Britain and Northern Ireland and United States of America. Each presentation is described in the Notes

of the Chair¹ document that was issued in lieu of a report (ECE/TRANS/WP.6/179). This session complemented a similar agenda item during the transport statistics meeting of the ITF in June 2020². At the end of the meeting, there was strong interest to continue the positive collaboration and not wait until next year's sessions.

4. After the meeting the secretariat discussed both meetings with the ITF, and given the exceptional situation and country interest, it was decided to organise a stand-alone informal webinar, to see what could be done to continue the conversation.

II. First Webinar, September 2020

5. In the first webinar, four presentations were delivered to an audience of around 45 people from member States and international organisations. The Joint Research Centre of the European Commission described their work on harnessing mobile network operator to inform the COVID-19 response at a European Union (E.U.) scale. This utilised strong cooperation with businesses across 22 countries to obtain the detailed mobility data. While data differences existed between the data provided by each operator, a harmonisation process meant that a comparable indicator could be generated at the NUTS 3 regional level, mobility functional areas could be produced, and these data were a useful input into epidemiological modelling of virus movement.

6. The German Federal Office for Goods Transport described how they have developed a German Truck Toll Mileage Index, using an existing administrative data source to develop an indicator that can be produced daily, is easily interpreted, and has an economically meaningful use.

7. Statistics Slovenia presented their work on new data sources in a holistic way. They described their efforts to collect mobility data using a mobile telephone application; the use of automatic traffic sensor data; and using mobile network operator data to measure roaming for both tourism and transport monitoring purposes.

8. Given the need with these new data sources for strong data sharing partnerships with the private sector, the webinar also included private sector views. Positium Ltd., a company based in Estonia, shared their work on using mobile positioning data to track mobility in different regions.

9. The webinar concluded with a general discussion and the decision to continue the series on an ad-hoc basis throughout the year, subject to sufficient speakers being available.

III. Second Webinar, January 2021

10. The second webinar was organised for January 2021. Statistics Canada presented their progress in developing a real-time business conditions index, which showcased the importance of timely transport data for generation of statistics in other domains (in this case business and economic statistics).

11. The Ministry of Transport and Communications of Chile presented their experiences using big data to track urban mobility patterns. This included estimation of origin-destination trips using Mobile network Operator data, as well as how they plan to transition towards a digital household travel survey.

12. Another private sector example was shared through this webinar, where the Finland office of Ramboll shared their experiences in tracking mobility patterns for urban transport planning, principally using contacts between mobile telephones and radio masts.

13. This webinar reached a total of seventy-six participants, and a more global audience with participation outside of the ECE region, including colleagues from other regional commissions.

¹ https://unece.org/sites/default/files/2021-01/ECE-TRANS-WP.6-179e_0.pdf.

² www.itf-oecd.org/transport-data-covid-19-crisis.

14. The presentations from both webinars can be found on the UNECE wiki site³.

IV. Possible Future Work and Outcomes

15. When establishing these webinars, the secretariat and the ITF set out a few general goals, which were to:

- Provide a platform for interested countries to exchange on critical issues they are facing during this COVID-19 crisis.
- Discuss methodologies and joint approaches to the use of “fast indicators” to ensure their comparability across countries.
- Develop strategies for new methods of data production, considering obtaining data from private sources, ensuring sustainability of production, and considering ways to measure the quality and accuracy of any new statistical outputs; and
- Collate available information in a single place for countries to use as they wish.

16. This overarching performance framework was deliberately left vague and without a clear end-goal in mind. The priority at the time was to respond to the real need faced by member States, and to provide something that would be useful in the short-term. This can be considered to have been achieved, in that the large number of participants in the webinars proves that countries are finding these webinars interesting.

17. Delegates may now wish to reflect on how these webinars could be progressed in the coming months and years. The webinars are likely to remain useful for their own sake, and also as a way to develop content for the regular sessions of the Working Party and to share information between countries.

18. As transport monitoring integrates these new data sources from experimental statistics towards regular official statistics production, there may be two areas where international cooperation may be most beneficial. Firstly, the sharing of country examples, best practices and country-led guidance may allow member States to learn from the experiences of their peers in harnessing these new data sources. Secondly, the webinars have highlighted that the countries who are already integrating new data sources into their statistics production are doing so in different ways, and a framework or methodological document may be beneficial at the international level, in order to harmonise approaches to the greatest extent possible.

19. The Working Party is thus invited to share opinions on these webinars, as well as future work on new transport data sources at the international level.

³ <https://wiki.unece.org/pages/viewpage.action?pageId=109352183>.