

BACK TO A SUSTAINABLE FUTURE



RESILIENT CONNECTIVITY FOR SUSTAINED RECOVERY AND ECONOMIC GROWTH

TRANSPORT STATISTICS



UNECE

Common Questionnaire: New System, Data Quality, Streamlining and New Data Needs

Alex Blackburn, UNECE

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Common Questionnaire



- **Reminder on new system**
 - **How do you find it compared to the old version?**
- **Data Quality**
- **Streamlining ideas**
- **New Data Needs**

Common Questionnaire: New System



- 2022 First year to Use Questionnaire Based Collection, Replacing the web-based system
- **ADVANTAGES:**
 - Excel-based. Data files can be shared across colleagues, filled in collaboratively, and uploaded when ready
 - No crashes when filling in data on web browser
 - Easier for us to do quality validation before publication
- Main principle: countries send all data themselves into EDAMIS

Common Questionnaire: New System



- **STRUVAL: Structural Validation.** This fails when the structure of the questionnaire has been changed, or data values are not in required format.
 - **Important: Do not change the structure of the excel file.**
- **CONVAL: Content validation.** Fails when sub-totals do not agree with totals (with a 5% threshold).

Common Questionnaire: New System



How has the new system worked for you?

Data Quality New registrations



■ New Registrations of *new* vehicles versus new registrations

B.II-44 DATE OF FIRST REGISTRATION OF MOTOR VEHICLE

The date of first registration of a motor vehicle is the first-time registration of the vehicle as new in a motor vehicle register, irrespective of the nationality of the register.

The dating of the registration is the date on which the registration was recorded at the motor vehicle registration office.

The registration of an imported second-hand vehicle is not a first-time registration but should be regarded as a re-registration.

Data Quality: New registrations



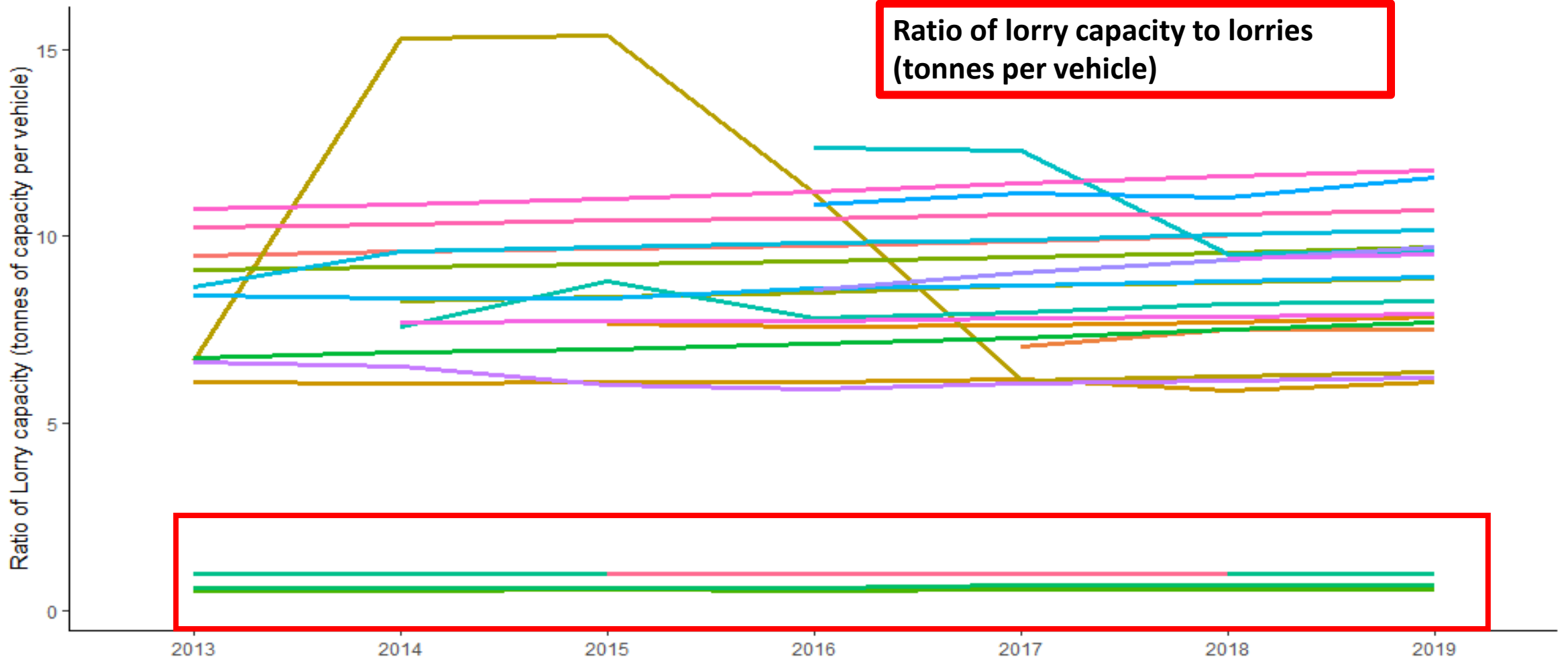
- Much interest in characteristics of **new** cars, particularly due to their fuel type. Including older imports makes progress towards green mobility goals harder to track.
- But environmental performance of older imported cars is of concern too. Should we track **both**? Do you have data on both?

Data Quality: Goods vehicle capacity



- **Load capacity of road goods vehicles**
- Questionnaire asks for tonnes of carrying capacity, but many countries provide vehicle numbers.

Data Quality: Load capacities



Common Questionnaire Data Quality: Rail



- Rail lines versus rail tracks
- Lines are one or more tracks, therefore TRACKS>LINES
- Some countries have tracks=lines (unrealistic?) or tracks only slightly higher than lines (possibly unrealistic?)

A.I-02

RAILWAY LINE

Line of transportation made up by rail exclusively for the use of railway vehicles and maintained for running trains.

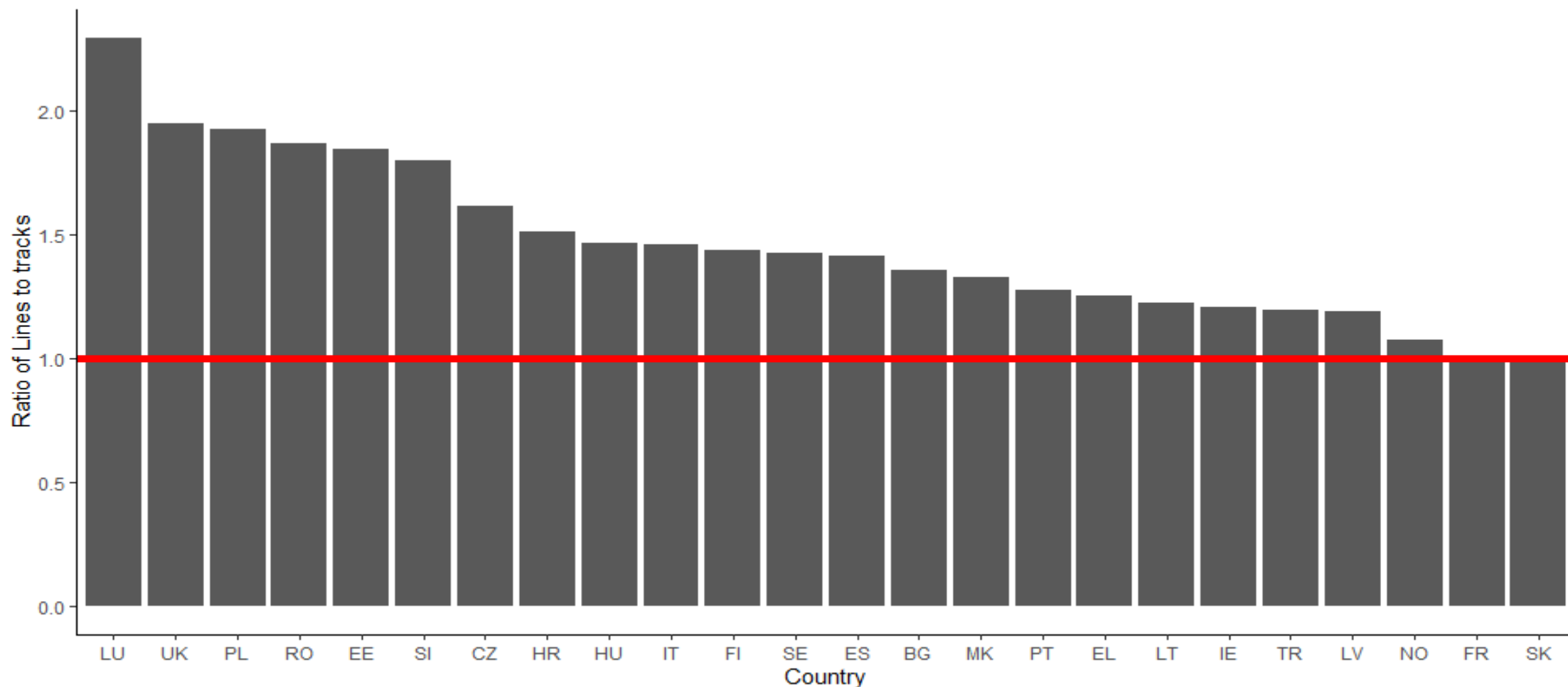
A line is made up of one or more tracks, according to the definition A.I-01 Track and the corresponding exclusion criteria.

Excluded are:

- Stretches of road or water even if rolling stock is conveyed over such routes, e.g. by wagon-carrying trailers or ferries.



Common Questionnaire Data Quality: Rail



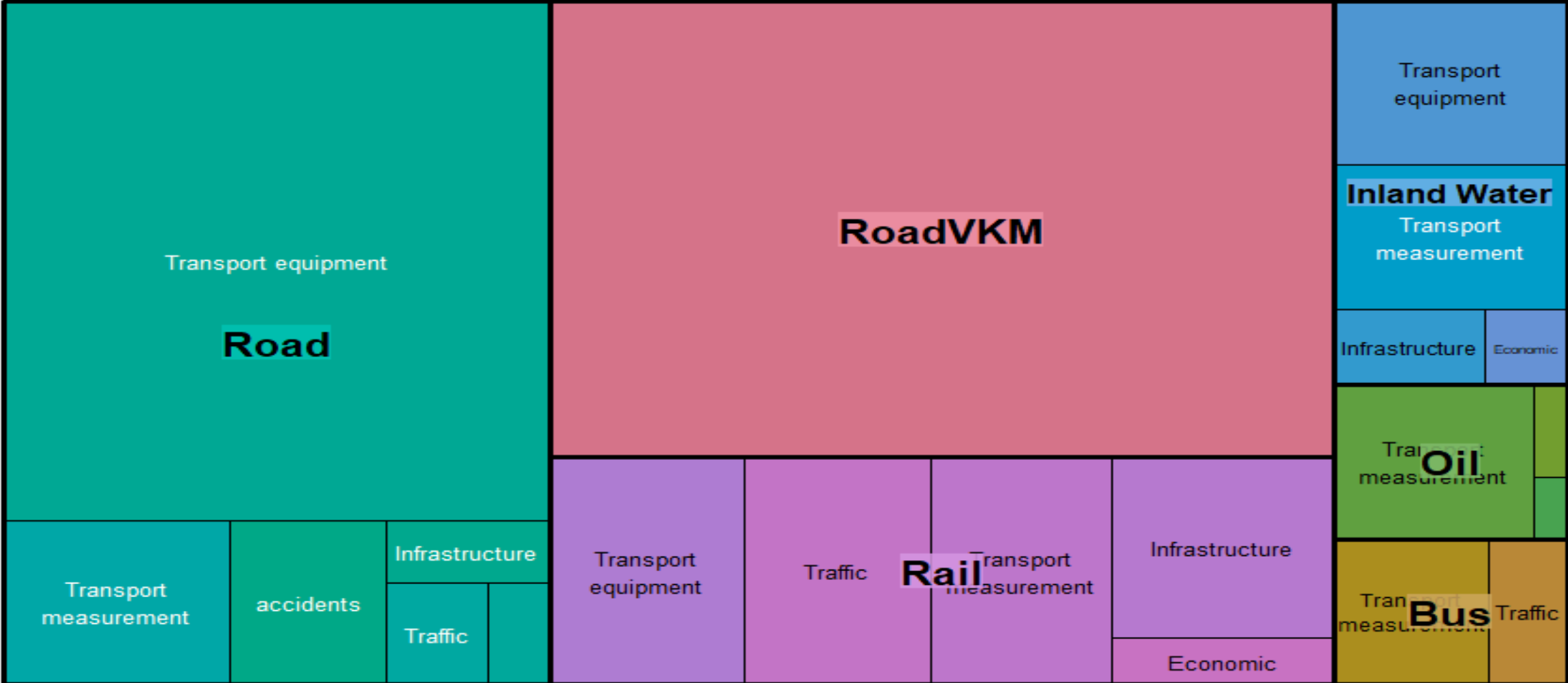
Common Questionnaire Streamlining ideas



- (See formal doc no. 10)
- We want to reduce the size of questionnaire when:
 - Data availability is poor
 - Data are not particularly useful or misunderstood
- Main areas for consideration: road goods vehicle capacities, rail hauled tonne-km, road vehicle-km.

Streamlining

1038 Indicators



Common Questionnaire Streamlining Road Vehicle-Km

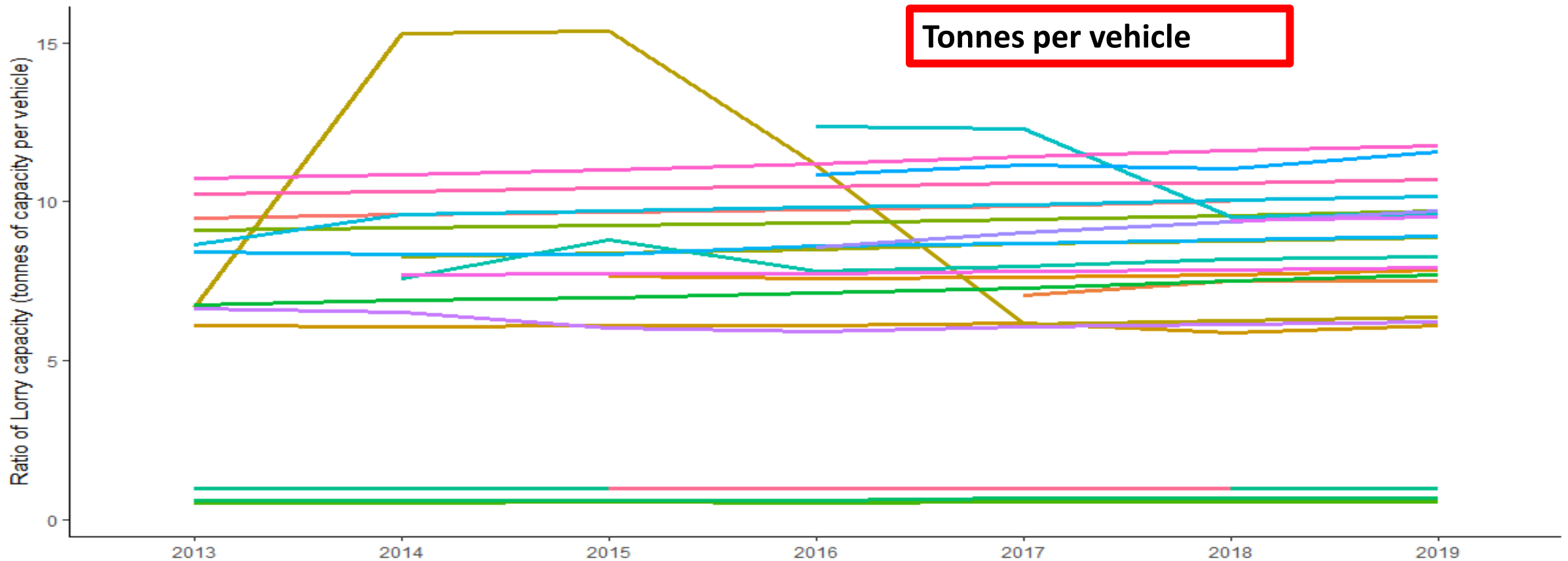


- 348 indicators in road vehicle-km chapter.
- Different concepts exist:
 - 27 indicators **National +foreign vehicles on national territory** (automated counters?)
 - 28 indicators **National vehicles on national territory** (automated counters minus foreign number plates?)
 - 294 indicators National vehicles (everywhere? odometer readings)
- Breakdown of vehicle-km very detailed (type of vehicle+age and fuel) means some indicators only have data for a handful of countries.

Streamlining Goods Road Vehicle capacities



32 Indicators. Are the differences between countries or trends over time useful?



Streamlining Rail hauled vehicle



5 indicators: hauled vehicle gross-tonne-km (by power source)

6 indicators hauled vehicle-km (type of vehicle, wagons etc)

11 indicators: hauled vehicle gross-tonne-km by type of train
(passenger/goods/other) AND power source

- **What is the added value of these data compared to other concepts of train-km and tonne-km?**

Streamlining timeline



- **June-July:** Countries reflect on these proposals and propose any of their own (**concrete** suggestions of specific indicators with reasoning)
- Partner organisations will circulate a written consultation to all countries end of Summer. Final discussion/approval at ITF & Eurostat meetings in Autumn.
- Any streamlining implemented in 2023 in time for the 2022 collection.
- Streamlining can only take place sporadically...

Common Questionnaire: Additions?



- (See informal document number 1)
- Public electric vehicle charging stations
- Many sources exist, but what about official statistics?
 - What is more analytically useful to count: locations, devices or plugs?
 - Speed is crucial. How should we define fast/rapid/super-rapid etc.?
 - How to define public?

Charging Stations



Data Item	Countries producing data	Definitions used
Charging Station	United States, Norway, Switzerland	<p>United States: a charging station location is a site with one or more Electric Vehicle Supply Equipment (EVSE) ports at the same address. Examples include a parking garage or a small parking lot.</p> <p>Norway: a charging station is a place/ location where there is one or more charging points.</p> <p>Switzerland: a charging station is a charging device that can have one or multiple plugs.</p>
Charging Location/ Site	Switzerland	Switzerland: a charging location/ site is where there is one or more charging stations. Several charging stations can be located at one site.
Charging Device	United Kingdom	United Kingdom: a charging device is a unit capable of charging the batteries of plug-in electric vehicles. Devices are classified by their power output, and each device may offer one or more connecting points.
Charging Point	United Kingdom, Norway, Netherlands	<p>United Kingdom: a charging point is either a single device or a number of connectors on a device which can be used simultaneously.</p> <p>Norway: a charging point is a reserved parking space with charging facilities for chargeable vehicles. At one charging point, there can be more than one connector, but only space for one vehicle at a time.</p> <p>Netherlands: the number of charging points reported are in fact the number of charging station outlets (sockets/ connectors). In practice the number of charging points and the number of outlets (sockets/connectors) are equal, except in the case of fast charging stations with 3 connectors, because not more than two can be active at the same time.</p>
Electric Vehicle Supply Equipment (EVSE) Port	United States	United States: EVSE provides power to charge only one vehicle at a time even though it may have multiple connectors. The unit that houses EVSE port is sometimes called a charging post, which can have one or more EVSE ports.
Connector	United States	United States: connector is what is plugged into a vehicle to charge it. Multiple connectors and connector types can be available on one EVSE port, but only one vehicle will charge at a time. Connectors are sometimes called plugs.

Charging Speed



Data Item	Countries producing data	Definitions used
Rapid Devices	United Kingdom	United Kingdom: those whose fastest connector is rated at 25kW or above.
Fast Charging	United Kingdom, Switzerland, Netherlands	United Kingdom: those whose connector is rated between 7kW and 22kW. Switzerland: those whose connector is rated above 50kW. Netherlands: those whose connector is rated above 22kW.
Regular Charging	Netherlands	Netherlands: those whose connector is rated at 22kW or lower.
Slow Charging	United Kingdom	United Kingdom: those whose connector is rated between 3kW and 6kW.
Charging type Level 1	United States	United States: It is a 120V standard wall plug using a J1772 connector. Provides 2 to 5 miles of range per 1 hour of charging.
Charging type Level 2	United States	United States: It uses 240V/ 208V for residential or commercial charging using a J1772 connector. Provides 10 to 20 miles of range per 1 hour of charging.
Charging type DC fast	United States	United States: There are three types (SAE CCS, CHAdeMO, Tesla) of DC fast charging systems depending on the type of charge port on the vehicle. Provides 60 to 80 miles of range per 20 minutes charging.

What is a “public” charger?



Data Item	Countries producing data	Definitions used
Public	Norway	Norway: Charging point public is the number of charging points available to everyone or visitors at charging stations. For the latter, it is assumed that you have an errand on site (e.g. shopping centre, office buildings, schools and other institutions).
Semi-public	Netherlands	Netherlands: a semi-public charging point is interoperable and have been reported as accessible by their owners. These charging points can for example be found in shopping malls, office buildings, parking garages and at private persons who have made their charging point accessible to others. The values for regular, work-specific, and visitor-specific semi-public locations have been added up.
Private-Fleet customers only	United States	United States: a private- fleet customers only station may allow other entities to fuel through a business-to-business arrangement.

Electric Vehicle: Definitions and Data



- What data does your government collect on charging infrastructure? What definitions?
- Regardless of international data collection, statistical definitions would improve international comparability.
- **Glossary annex?**

Common Questionnaire: Tidying up



- **Move remaining vehicle-km indicators into road?**
- **Move bus into road?**

Common Questionnaire 2021 Collection



- Plan to Launch collection of 2021 data end of August, with a deadline of November.
- Is this convenient?

Summary



- Tell us your experiences with the new collection system
- Please take note of points on data quality
- Streamlining comments? Please send written comments by the end of June before the partner organisations write a proposal
- Is the proposed timeline for 2021 data compatible with your workload?