TRANSPORT DATA COMMONS INITIATIVE

"If you cannot measure it, you cannot improve it!"

This famous quote by Lord Kelvin (1824-1907) reflects the central principle for achieving sustainable mobility, and subsequently, the SDGs and the Paris Agreement. However, in most low- and middle-income countries, transport data is difficult to access (due to fragmented databases), the quality of the data is poor, or the data is not even collected at all.

This is why international development organisations, alongside their partner governments, regularly need to commission experts and consultants to collect transport and emissions data. These great minds do a wonderful job of publishing studies and informing governments and policymakers.

What is the problem?

In many countries, statistical systems are not yet fully developed. As a result, most international organisations collect data for the specific objective and sub-sector together with their partner governments, resulting in a variety of indicators. In addition, information is usually published in PDFs and uploaded to different websites, or sometimes not made publicly available.

This makes it difficult to cross-check data and compile consistent time series. Extensive resources are spent on extracting, adjusting, checking and using data, and sometimes efforts are duplicated. Finally, the results are published again in PDFs. A common, shared and frequently updated database for the transport sector is not publicly available - yet.

What could be a solution?

International development organisations, governments, cities, research and data managers and civil society would benefit from data that is accessible and regularly updated and verified. It is important that it is openly available and accessible. There should be a mutually beneficial exchange of information between those collecting and providing data.

Our vision is to develop a common data platform where all participating organisations can both contribute and extract transport and emissions data for modelling greenhouse gas emissions and other impacts. Such a 'transport data commons' would create a shared value that the participating organisations could not achieve on their own. In the medium term, it would save money, reduce data gaps and improve the quality of modelling, evaluation, impact assessment and reporting of transport projects.

Who are we?

To start the conversation, GIZ used funds from a German government-funded project on transport MRV to host a co-creation workshop on the sidelines of the ITF Summit in May 2022. A diverse group of 25 people from 21 international organisations and initiatives, as well as representatives from civil society, attended the workshop and, using the design thinking methodology, created a shared vision for a Transport Data Community Initiative (TDCI). Building on this momentum, we then defined a course of action (see below).

Since May 2022, the initiative has grown and welcomed additional partners (see below). Three working groups have been established, covering strategy, data architecture and user perspectives. The group coordinates its activities through regular virtual meetings of the full group.

What would be the benefit for the partners?

The aim of the initiative is to create a common, accessible and meaningful database that can be used by stakeholders to provide more effective support to developing countries and to design projects. Participating organisations would benefit in a number of ways:

- Existing data could be easily used for modelling and cross-checking. Time consuming data extraction and collection would be reduced.

- Newly collected data could be uploaded and made available beyond the usual PDFs. The peers active on the platform would help to improve data quality.

- The platform would direct users to other databases and connect data that is currently fragmented (e.g. through APIs).

What do we aim to cover?

The primary objective of the initiative is to cover the transport-climate nexus, so the initial focus is on reporting data from the transport sector needed to derive the sector's greenhouse gas emissions. These include vehicle fleet, distance travelled, energy consumption and carbon content of fuels for all modes of transport.

Air pollution and road safety are also topics of interest to the initiative and the scope could be expanded over time following successful implementation of the first phase of the initiative focusing on transport and climate.

What is the course of action?

We started the process with a co-creation workshop at the ITF in Leipzig. We are currently working in sprints with our own internal resources and funding to (a) prototype the database, (b) institutionalise it and (c) identify funding opportunities by March 2023. We are keen to find partners who will see the value, help us institutionalise the initiative and ensure long-term impact.

For the sprints, we have organised working groups: one on the overall strategy, one on the data and prototype, and one on user benefits. We all meet online once a month to update and engage the whole group. In October we met in Oxford for a second face-to-face workshop and we may meet again in February/March 2023 to consolidate and summarise our findings.

What do we need?

We are now looking beyond the group in Leipzig. We want to be inclusive, and involve as many organisations as possible that are currently facing the same challenges. Those who are interested would be included in our communication channels, regular meetings and workshops.

We are looking for partners who can contribute to the common data platform and who want to contribute to data provision or funding to ensure sound data management.

Contributions to the initiative could be:

a. In kind efforts of staff
b. Funding for activities
c. Datasets to be provided
d. Infrastructure to run the database

Our mission is not just about organisations. We are a group of individuals driven by a passion for transport data. What unites us is the understanding that working together is the key to achieving our diverse interests.

First conceptual mock-up of the prototype for the Transport Data Commons

Annex: List of current partners (as of March 2023)

Organisation	Contact person	Working Group(s)
Asian Development Bank (ADB)	Jamie Leather, Cornie Huizenga	Strategy, Data Architecture (*Observers*)
CAF - Banco de desarrollo de América Latina	Catalina Vanoli	*Observer*
Climate Compatible Growth (funded by FCDO)	James Dixon, Holger Dalkmann, Mark Hauls	Strategy, Data Architecture
European Bank for Reconstruction and Development (EBRD)	Victor Bonilla	*Observer*
Fabrique des Mobilités	Malou Charenton	*Observer*
FIA Foundation, Global Fuel Economy Initiative	Sheila Watson	Strategy
German Development Cooperation (GIZ)	Daniel Bongardt, Verena Knöll, Kirsten Orschulok	Strategy, User Insights, Data Architecture
Global Network for Popular Transportation	Benjie de la Peña	Data Architecture
Institute for Energy and Environment (IFEU)	Marie Colson	Data Architecture
The International Council for Clean Transportation (The ICCT)	Eamonn Mulholland	Data Architecture
The World Bank	Wenxin Qiao	*Observer*
International Energy Agency (IEA)	Jakob Teter	*Observer*
International Institute for Applied Systems Analysis (IIASA)	Paul Natsuo Kishimoto	Data Architecture
International Road Federation	Julia Funk	*Observer*
Institute for Transportation and Development Policy (ITDP)	Taylor Reich	*Observer*
International Transport Forum (ITF)	Matteo Craglia	User Insights
Joint Research Centre (JRC) of the European Commission	Jacopo Tattini	*Observer*

KfW Development Bank	Reiner Koblo	*Observer*
Loughborough University	Naomi Watts	*Observer*
MobiliseYourCity (on behalf of AFD)	Vincent Larondelle	User Insights
Ricardo	Dominic Sheldon	User Insights
Shared-Use Mobility Center	Benjie de la Peña	Data Architecture
Stockholm Environment Institute (SEI)	Charlie Heaps	Data Architecture (*Observer*)
SLOCAT Partnership	Maruxa Cardama, Nikola Medimorec	Strategy, Data Architecture
Transformative Urban Mobility Initiative (TUMI)	Lena Plikat	Data Architecture
University of California in Davis (UC Davis)	Pierpaolo Cazzola	Data Architecture
University of Chalmers Göteborg	Sonja Yeh	Data Architecture
UNECE	Francois Cuenot, Alexander Blackburn	Strategy, Data Architecture