

# GIZ Transport & Mobility: Areas of Expertise



Sustainable Urban  
Mobility



Freight and Logistics



Poverty and Transport



Climate and  
Environment



Fuels and Vehicles

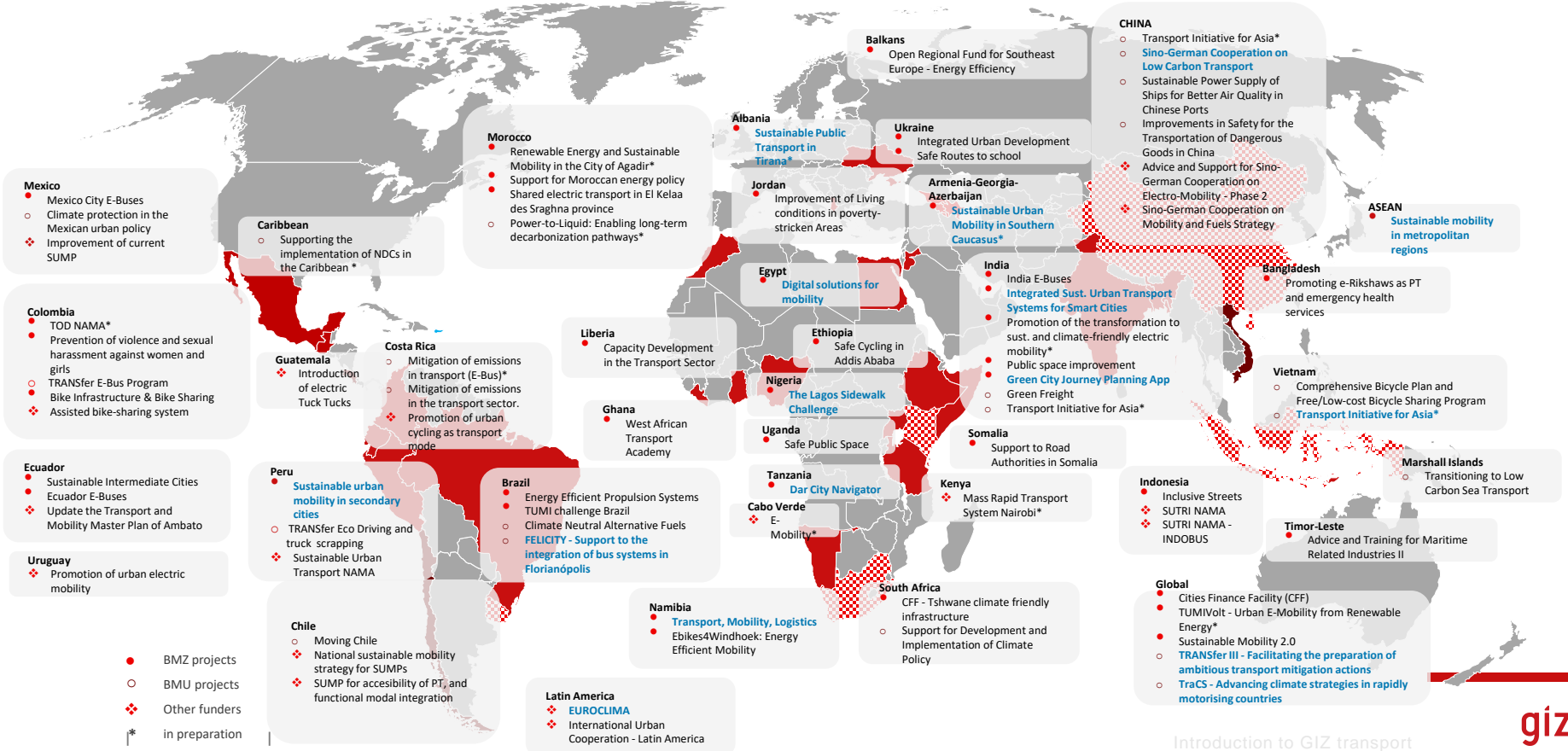


Infrastructure  
Management



Road Safety

# ...Digitalisation and Data in Transport & Mobility – Increasingly important!



## Project Highlights: Mobility Platforms, Digitalisation, Data and more

- **India:** ITS system architecture, Data analytics Dashboard, Tool for identification of routes for e-buses, Open Data Policy and Mobility Data Specification
- **Georgia:** data-driven mobility between Georgian and Azerbaijani cities
- **Albania:** Urban mobility data strategy for Tirana, Real-time modal share modeling through image recognition software, Origin-destination modeling through GPS, Digitalisation of bus planning and service management through Data Dashboards, Automated customer feedback integration, AVL, App-based capacity planning/route profiling, Automated cycling counters
- **TraCS/MYC:** Emissions Calculator (digitalized together with AFD)
- **Vietnam:** Online MRV system for transport (inventory and progress of implementation of NDC actions) (btw: close coordination with World Bank (Shigeyuki Sakaki))
- **Brazil:** Transport Association MR Florianopolis, including digital tools for planning, routing, pricing, etc)
- **Peru:** “Data Ware Houses” for Urban Mobility Planning and Operation

From models to smart decision-making: **digital twins**

## So far...

- **Innovation:** Tech-Detector: [https://viz.envisioning.io/giz\\_mobility/](https://viz.envisioning.io/giz_mobility/)
- **Testbed:** Data Lab: <https://www.giz.de/expertise/html/61847.html>
- **Information:** *The Age of Data in Transport – Data, Artificial Intelligence (AI) and Blockchain as digital transformers of the transport sector*



Data and Data  
Privacy in  
Transport



Artificial  
Intelligence (AI)  
in Transport



Blockchain in  
Transport



Mobility as a  
Service (MaaS)



Implications for  
Public Sector and  
GIZ

- **Internal Knowledge Management/CoP:** “Digitalisation and MAAS”

BACK TO TECHNOLOGIES



**Mobility as a Service (MaaS)**

By integrating different modes of transport in online platforms, Mobility-as-a-Service offers a user-centric mobility package which is flexible, personalized and on-demand. By harnessing collaborative modes of production and consumption, the fundamental assumptions of mobility are being challenged.

Mobility-as-a-Service encompasses the use of technology to improve all aspects of transportation through servitization - the transformation of existing systems or processes into discrete services. Facilitated by advanced mobile information and communications technologies, it complements a broad range of innovations in the mobility sector - from autonomous cars to connected cities. Although MaaS is a broad concept, from a functional perspective, it relies on real-time information, trip planning, and booking in combination with technologies such as GPS, e-ticketing, and e-payments. Services could be integrated using platforms, which allow for seamless transactions between users and providers of transportation services.

Shift

- 01 World Passport
- 02 Underground Delivery Street
- 03 ePrivacy Accountability
- 04 Burdenless Hygiene
- 05 Dynamic Mobility Pricing
- 06 Geospatial A
- 07 C



Mobility as a Service (MaaS)

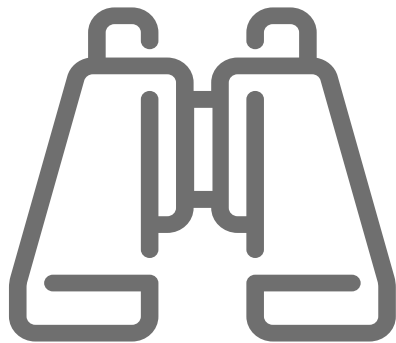
### DATA4MOBILITY

The use of the new data sources and analysis methods emerging in the context of ongoing digitalization and technological development can enable a more inclusive and sustainable form of (urban) transport planning. The Data 4 Mobility experiments in Dar es Salaam, Tanzania and Bangkok, Thailand aim to investigate whether it is possible to gain a better understanding of urban mobility by intelligently combining and evaluating different data sources such as satellite data, data from ride-hailing services etc. and thus contribute to a more sustainable form of transport and urban planning.

In Dar es Salaam, a prototype dashboard was created, which connects various data sources. The dashboard illustrates the potential of intersecting relevant data sources and can help mobility planners to get a more accurate picture of their city. Find out more [here](#).

In Bangkok, prototypical models based on the ride-hailing data were trained, illustrating the potential of this new big data source in various relevant areas such as traffic flow analysis, speed profiling for certain route sections, volume forecasts and air quality estimates. Read more about the experiment [here](#).

# Planning for growing African cities



SENSE IT

Mobility Observer  
Satellite Data for Mobility

- **Satellite data for 5 Regions // 50 cities**
- **Improve decision-making based on reliable data for improved integrated transport solutions**
  - **Scale up to 150+ cities**

Circular economy



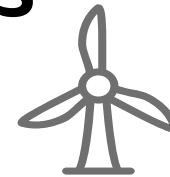
Zero carbon production processes



Carbon-neutral construction



Rapid Rail & Bus



100 % renewable electricity



15 minutes (sub-)centres



Full data integration



Highly qualified staff

## Open Questions

- What's the WBG position regarding the topics AI, Big Data for Mobility?
- How to incorporate/apply this this effectively int the African context?

# Contacts

## Dr. Sebastian Ebert

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Transport Advisor

Section “Energy and Transport”

Division 4D00 – Climate Change, Rural Development,  
Infrastructure

Deutsche Gesellschaft für

Internationale Zusammenarbeit (GIZ) GmbH

PO Box 5180

65726 Eschborn, Germany

+49 170 75 45 165

+49 6196 79 80 1780

[sebastian.ebert@giz.de](mailto:sebastian.ebert@giz.de)

[www.giz.de/transport](http://www.giz.de/transport)

## Armin Wagner

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Senior Advisor Sustainable Mobility

Section “Energy and Transport”

Division 4D00 – Climate Change, Rural Development,  
Infrastructure

Deutsche Gesellschaft für

Internationale Zusammenarbeit (GIZ) GmbH

PO Box 5180

65726 Eschborn, Germany

+49 6196 79 2650

+49 6196 79 80 2650

[armin.wagner@giz.de](mailto:armin.wagner@giz.de)

<https://twitter.com/urbanarmin>

<https://www.linkedin.com/in/urbanarmin/>

[www.giz.de](http://www.giz.de)

**Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH**

Registered offices  
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36  
53113 Bonn, Germany  
T +49 228 44 60 - 0  
F +49 228 44 60 - 17 66

Dag-Hammarskjöld-Weg 1 - 5  
65760 Eschborn, Germany  
T +49 61 96 79 - 0  
F +49 61 96 79 - 11 15

E [info@giz.de](mailto:info@giz.de)  
I [www.giz.de](http://www.giz.de)