

Outcome Document 2018

“Getting on the Right Track – the Future of Urban Mobility”

THE CHALLENGE: Inadequate Mobility in Growing Cities

Urban mobility in most developing countries is facing severe problems. Many times it is neither climate-friendly, nor adequately serving the needs of the people or able to spur local economies. It is by no means in line with the trajectory of the Paris Agreement on combating climate change: In fact, many cities lack formal public transport while at the same time they grow exponentially. Thus, the services available are often rendered by poorly regulated informal providers. As a consequence of favoring individual motorised transport and missing formal public transport, congestion is high – and with it the economic cost: On average it amounts to 4 % of the income of city dwellers. In exceptional cases this figure may go up to 10 %. Many people have to pay enormous ticket prices to get to and from work; in some African countries the poor have to devote 50 % of their disposable income on transport. On top of that traffic is massively contributing to poor air quality in cities. In Indian cities alone more than 0.7 million people die every year from diseases caused by air pollution. And a good deal of the 1.3 million people that fall victim to road accidents and many more that get injured every year meet with their fate in urban and peri-urban environments. All in all, it is clear that the present pattern of urban mobility is coming to its limits – it does not benefit economic development, service the growing number of city inhabitants and is neither climate- nor environment-friendly.

Currently, the major part of the annual 1.4 trillion USD of investments in the transport sector goes to non-sustainable infrastructure. Good practice from cities and countries around the world shows that a paradigm change towards sustainable transport is possible. However, it requires political will and reforms, institutional strength, administrative and technical capacity as well as capital – and all of that at the same time.

In line with this analysis the international conference hosted by KfW in December 2018 in Frankfurt, attended by 200 experts, identified key actions for a mobility transition with a special focus on electrification and digitalisation.

POSSIBLE SOLUTION I: Expanding Different Forms of E-Mobility

Electrifying transport is considered one of the main areas towards reaching sustainable urban mobility. In the national climate action plans of more than 50 countries, electrification of transport is a key element. In addition to decarbonisation, electric vehicles can contribute significantly to air quality improvements and noise reduction in cities, which generate substantial health benefits.

However, the transition to e-mobility should be an integral part of a wider transformation. Instead of just replacing dirty with cleaner vehicles, it is crucial to ensure the investment is aligned with a wider integration of transport plans as well as efforts on enlarging the public transport system and “greening” the electricity grid.

In order to enable change as swiftly as possible a bundle of actions, implemented by different actors, are needed:

National Governments

Although national governments are not primarily responsible for city developments they set the stage and the framework for them. In particular they should focus on the following actions:

- National governments need to foster **sector coupling**, i.e. the interconnection of the energy consuming mobility sector with power production based on renewable sources, provide for greener electricity and a strong power grid in order to make e-mobility climate friendly.
- **Cross ministerial cooperation** and coordination on the national level are key. National Urban Mobility Policies (NUMPs) can provide a mechanism to coordinate between different levels of government and among different departments to ensure that policy interventions and investments are complementary and deliver on all relevant objectives.
- National governments should make use of **regulatory and fiscal measures to set incentives** for sustainable modes and disincentives for conventional vehicles, e.g. subsidies, favorable electric vehicle tariffs on one hand, taxes, restrictions and standards on imported vehicles on the other.
- **Subsidies for public transport** should be provided by the national government to municipalities to make a good level of service possible at affordable prices.
- **Electrification of public transport** should be accelerated through national policies and programmes on the national level.
- National governments should be in the position to define **common charging standards** for different modes.

Cities / Local Governments

City administrators are the major actors for the transition to green mobility in urban settings. In particular they should focus on the following actions:

- **Greening the grid:** Cities should transform communal utilities towards renewable energy providers.
- **Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies** can be drivers for change. SUMPs are overarching instruments to assess the effects of electric mobility and digitalisation projects. Adequate institutional settings in terms of knowledge, resources, capacity and cooperation between authorities are an essential precondition for their success. Cities should integrate all types of technologies, including electric mobility and Mobility as a Service (MaaS) into the SUMP process.
- When planning their mobility networks, **cities should balance** the high potential of e-mobility solutions for mass-transit and the high level of maturity of small-scale mobility services (2-3 wheelers, mini-buses).
- Implement **push&pull measures:** incentivise public, shared and non-motorised modes; create disincentives for individual vehicles.
- **Public transport**, especially mass rapid transit, should remain the back bone of the system and receive resources commensurate with this objective. Electric public transport should be enhanced: trams, e-buses, light rail, metro, commuter trains, cable cars. Technological innovations in the field of batteries and fuel cells reduce investment cost for buses and trolley-bus systems. A shift to electric vehicles in individual mobility could be promoted through provision of charging stations and reserved parking areas.
- By **electrifying communal fleets**, cities can save emissions on a larger scale and set an important example.

- Cities should start to work together for a **common procurement** to bring down costs and scale up the uptake of electric vehicles.

Development Banks / Financiers

In light of the gigantic investment needs, especially in developing countries, international financiers have an important role to play as enablers for the urban transport transition. In particular they should focus on the following actions:

- To achieve **policy and investment planning coherence**, national Urban Mobility Policies (NUMPs) and Sustainable Urban Mobility Plans (SUMPs) can provide a framework for development and implementation. Development Financing Institutions (DFIs) can contribute to coherent planning by financing investment packages that comprise a SUMP and a number of prioritised investments within the plan.
- DFIs should help meet the demand for **renewable energy** needed to make e-mobility climate friendly. “Green” financing promotes and creates possibilities to invest in a transport and energy transition.
- The **informal services** are a key part of the mobility of people in the global south. Prioritise investments in public transport, but ascertain that informal transport services are integrated into new public transport networks in order to ensure overall accessibility of the system. Scrapping schemes might be a way to encourage the fleet renewal of informal providers.
- Another field of action is enabling market access for **electric two-wheelers** and supporting **start-ups** on new mobility services.
- To foster the uptake of electric buses and close the funding gap – particularly the upfront costs – DFIs need to develop **new financial instruments** for lending to cities and operators that reflect the special challenges of financing capital intensive social infrastructure on subnational level.
- As to development or elaboration of financial instruments it is possible to use **policy-based lending** as a tool to shape the policy environment and facilitate policy dialogue.
- Due to the local level of investment, it is helpful if financiers can serve cities without national government involvement. **Provision of guarantees** and preferential loans to all types of mobility service providers may be more important than subsidies by governments.
- **Incubator support** (start-up fund, venture capital fund) and micro finance instruments for innovative solutions to allow access to finance for start-ups.

Private Sector

The private sector needs to move beyond pilots to large scale roll-outs. And it is up to the private sector to utilise the economic potential of para-transit, the often informal forms of privately organised public transport supplement systems. Further, it should figure out the business models for charging schemes. In addition, creating multi-stakeholder platforms to enable dialogue, coordinated policies and investment is a useful tool that includes the private sector.

POSSIBLE SOLUTION II: Taking Advantage of Digitalisation

Digitalisation is particularly suited to combine different mobility modes and thus help to overcome the era in which individual motorised transport dominates cities. Information technology solutions can make transport safer and more secure for women as well as better and more affordable for the urban poor. The biggest challenge now is to steer the unprecedented technological development towards an improved and affordable access to sustainable mobility solutions for all people. The challenge also includes finding the balance between being responsive to the need for individual privacy while

at the same time enabling open access to data. The technology to do so is already available, continuously improving and in principle useable in developing countries.

In order to enable change as swiftly as possible a bundle of actions, implemented by different actors, are needed:

National Governments

Enlarging the digital infrastructure, not least for modern forms of mobility, is a key area of action for national governments:

- It is important to increase data collection and make **open access** to data obligatory so that private businesses and the interested public can have access. National governments must create a **regulatory environment** that ensures fair and equitable access to data and to promote coordinated data collection.
- Another key success factor to find the **right balance for a functional, fair and transparent system** is data security. Governments should balance the needs of the users with the business interests of transport providers. Guidance on establishing rules and regulations followed by their implementation and enforcement is crucial.
- National governments need to enable cities to improve **management of their traffic flows** by allowing charging for parking or congestion pricing.

Cities / Local Governments

The potential impacts of digitalisation on cities are huge. Reduced individual traffic could free urban space for public use. Therefore, cities are particularly asked to take action and make use of the advantages of digitalisation:

- Digitalisation enables to integrate private and public, formal and informal transport modes into **one system**. Through better integration of schedules and routes of public as well as private operators of different modes and one-for-all ticketing systems, digitalisation provides the chance to largely improve the quality of public transport. Cities should support and accelerate that process.
- As the bulk of public transport services in developing countries are currently offered by informal providers they should be integrated and their services improved. Cities can facilitate these processes by **laying the administrative ground for new services** such as ride hailing or dock-less bike sharing as they need dedicated urban space.
- Digital innovation in transport management includes **pricing systems** such as electric road tolls, congestion pricing and parking management. Cities should foster the introduction of such systems.
- They should also **incentivise ride sharing** or pooling e.g. through high occupancy lanes or locally adapted apps.
- **Digital road traffic management** is a successful measure if clear goals are set and effects monitored. Real-time information for public transport favourably affects their services.
- Cities can organise competitions to initiate innovation for digital solutions **tailored to the local needs** and enable MaaS applications through open data policies. In particular, cities can recur to IT solutions aimed at women and the urban poor.

Development Banks / Financiers

Development banks and financiers can speed up the process by steering funds in that direction:

- They can support digitalisation in transport by funding essential components through their loans and grants: e.g. **adding data collection systems**.

- Many start-ups are very active in this space. Providing support in partnership with foundations and the private sector could thus foster this creativity. With their experience, financial network and adopted products (e.g. SME funds, capacity development measures), development financiers' activities go well beyond the provision of financial resources. They also include **guidance for scaling up business**.

Private Sector

Many mobility services are in private hands. Therefore, the private sector is an important player in fostering digitalisation:

- It should introduce **digital innovation** in public transport and integrate business solutions for informal transport into public transport operation systems.
- It should develop and offer **sharing apps** to contribute to a mind change towards car ownership and elaborate the possibilities of MaaS. "White-label" solutions, that allow cities to be the final owner and operator of these privately developed mobility platforms should be favoured.

THE WAY FORWARD

An important task for governments, cities, development financiers, donor organisations and public sector is to make sure all members of society benefit from the changes in mobility systems. Inclusive and accessible sustainable urban mobility requires giving priority to walking and cycling as these are by far the most important modes of transport in cities. They need to be combined with an attractive and high quality public transport as the backbone of mass transportation to keep growing cities moving. Finally, shared small scale modes of transport should have priority over individual motorised solutions.

The former modes are often neglected. Yet, walking and cycling, sharing and public transport are integral parts of a mobility revolution and can benefit from the rise of electric mobility and the opportunities of the digital era.

It needs both small and large scale measures for the transition towards sustainable mobility. And financing on all levels is one crucial factor to enable this change. Development banks must definitely step up their efforts to increase financing of well prepared and quality projects. However, it is also clear that the magnitude of the funding requirements surpasses the capacities of financiers by far. Therefore, it also needs enhanced funding by national governments, subnational entities and the private sector to implement the transition towards sustainable mobility for all.