Responsive Transportation-Oriented Policies for the MED Region in the Face of Covid-19
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Executive Summary

The transportation sector is exposed to significant paradigm shifts and financial difficulties due to the Covid-19 epidemic in Mediterranean countries as well as all over the world. In particular, public transportation is struggling worldwide, with reduced passenger load factors of 50% to 90%. To address this issue, this brief aims to provide sustainable transportation policies for the region. It develops these policies by introducing the following structure:

- effects of the epidemic on transportation,
- detailed observations from Tunisia and Turkey,
- potentials discovered, such as bicycle & pedestrian-friendly urban streets and green recovery packages, throughout the process,

1. Introduction: The Covid-19, Mediterranean Countries & Transportation

On March 11, the World Health Organization declared COVID-19 a global pandemic [1]; as of March 30, about three billion people were living in isolation as a precaution against the spread of the virus [2]. In March, the epicentre of the virus, which primarily affects the Asian continent, was to be found in Europe. The rapid increase in the number of cases in the Americas and the recent re-increase of cases in Asia and Europe, especially since mid-April, indicate that the outbreak was as critical as it was during the beginning-phase. The Mediterranean region, on the other hand, is at a critical point in terms of the geographical spread of the virus, as it is within the intersection of both the European, African and Asian continents.

It is highly likely that the coronavirus outbreak will have longer-term impacts on our individual behaviour and lifestyle, on the way we work, consume, and travel. Such impacts can be observed even today, espe-
cially considering available data on mobility changes in transportation, retail & recreation and parks in Mediterranean countries. The Google COVID-19 Community Mobility Reports show that visits to retail and recreation areas in Egypt, Spain, Greece, Turkey, Israel, Italy, France, Jordan, Libya and Morocco have significantly decreased within the first 3-month period after the epidemic was officially declared. A reduction of approximately 50% in Morocco and Egypt is a remarkable change that provides an understanding as to the impact of the epidemic on the retail and recreational sectors. Even considering the first 6-month period, we observe that mobility activity in these areas is still below the reference value in Spain, Turkey, Israel and France.

In the first 3 months of the pandemic, the ratio change in park usage varies across countries, while it is observed that the mobility activity in parks has increased in every country without exception within the

Figure 2. Mobility Changes in MED Countries
first 6 months. Between June and September, the movement in public transport hubs, which slackened dramatically in June, has generally increased in all countries. However, it is still below the standard reference value in all countries except Egypt. The recently observed declines of 63% in Jordan and more than 35% in Spain, Libya and Morocco point to the importance of policies to be developed on transport and epidemics in the Mediterranean.

Many countries initially closed their borders and imposed curfews – resulting in sharp reductions in transport demand also on the regional and continental level. Although these actions, which were the first response against the epidemic, have been partially removed over time, there are still several travel restrictions and measures changing day by day inter countries cities or sub provinces. Considering the data from London, Berlin, New York, Moscow, Milan and Sydney, it was observed that the journeys that came to a halt in April remained below normal values in August.

Public transport is severely impacted by travel bans and individual concerns to avoid public gatherings leading to plummeting ridership and reduced travel and transport demand. The overall picture and the longer-term implications of the public transport systems are still very complex and fuzzy. The sector, in particular, is struggling worldwide with reduced passenger load factors of 50% to 90%, resulting in revenue losses of up to 75%. Single ticket sales, which normally account for 50% of ticket revenues, slumped by 80% to 90% according to the Association of German Transport Companies [3]. Detailed information and observation on the transportation sector are available on TUMI’s Covid-19 & Sustainable Mobility publication (2020).

2. Approach

The comparative case studies in the Mediterranean region highlighted in this Brief present the impact of the Covid-19 epidemic in transportation. In this regard, the experiences of Tunisia from the Africa region, and of Turkey, as a part of the Middle-East scope and geographically close to the EU, take part in the comparative observation. In light of these analyses, as a conceptual recommendation framework for the transport sector, the Avoid-Shift-Improve (A-S-I) Approach is provided by the authors. It aims to form a useful base for transportation-oriented short and long-term actions. Explicit recommendations within the A-S-I approach with MED Region-specific examples will be presented in the scope of section 5, Transferability of the A-S-I Approach into the MED Context.

1. Avoid: Measures to reduce individual (motorised) transport demand - both in the short term to combat the coronavirus epidemic and in the long term to reduce carbon emissions, accidents and congestion,

2. Shift: Measures to direct users to safe, clean, low-contact means of transport in the wake of the corona crisis. In the long term, promoting forms of active mobility such as walking and cycling and attractive, reliable, accessible, affordable and competitive public transport to keep cities liveable,

3. Improve: Improving quality of operations and services, especially in public transport, in order to remain attractive and, in particular, to avoid crowding. An improved quality of biking and walking will help to free space in other modes [3].
3. Case Studies from MED Region

3.1 Tunisia

The number of Covid-19 cases in Tunisia has been rising continuously since the first case was confirmed on March 2, 2020. It has been reported 8,178 active cases, 996 new daily cases and total 159 coronavirus deaths as of September 21 in a country with almost 12 million of population. However, the actual number of cases is likely to be far higher than what was reported given Tunisia’s limited testing capabilities. Like many other countries, Tunisia’s medical infrastructure is poorly prepared for infection control and...
treatment as marked by the presence of only three hospital beds per 1,000 people. The state is trying to prevent further spread of the virus mainly through social distancing measures. Two days after the state decided to close borders for all commercial travels and ban public events and gatherings on March 16, it also imposed a two-week curfew between 6 pm and 6 am to restrict the mobility of people [3].

Many doctors have warned against the risk of the spread of the virus via buses and metros as they are frequently over-crowded. The interview data [collected prior to the arrival of Covid-19] in the “Youth Engagement and Skills Acquisition within Africa’s Transport Sector” project in Tunis supports this concern. Many public transport workers and passengers alike complained about the shortage of buses and metros, particularly in peri-urban areas. The interview data also indicates that public transport is not hygienic and is poorly managed and unsafe.

Amid the growing concern about the safety of passengers and workers, the public transport sector initiated several measures to combat the spread of infection. The Ministry of Transport and Logistics said that all public transport modes would be sanitized regularly and encouraged people to avoid unnecessary travel. Following the government’s curfew decision, the national public transport company TRANSTU announced that it would provide 160 additional buses and 17 additional metro trips during the late afternoon time in order to avoid peak-time congestion during the curfew hours. On March 20, a representative of metro conductors, Rachid, called for the general lockdown of the country via his Facebook post, warning that metro workers will stop working if the government fails to do so.

As the situation with Covid-19 evolved, Tunisia finally entered into two-weeks of general quarantine on March 22 with the exception for those who work in vital sectors including security, health, water, electricity and public transport. Prime Minister Elyes Fakhfakh announced that only around 15% of Tunisians who work in vital sectors are allowed to go out for work, and military and police officers will be deployed on streets to control the mobility of people. However, all Tunisians can leave their house for a short walk and grocery shopping. Following the government’s decision, TRANSTU reduced the service of metros and buses to every 30 to 45 minutes [ibid.]. Furthermore, the 50% capacity reduction of the public transport fleet was decided by TRANSTU on May 4 [4]. The company introduced a new e-payment system for transportation tickets; moreover, it keeps providing updates on wearing mask regulations, and regular sanitation campaigns. Tunisia announced recorded zero new coronavirus cases for the first time since early March, on May 10 [5]. However, with the ease of lockdown measures, the new Covid-19 cases started to be observed, beginning on June 10 [6].

3.2 Turkey

The Ministry of Health announced the first Covid-19 case in Turkey on March 10, 2020. Since the virus started to spread earlier in some of the contiguous provinces of Turkey, disinfection in public places and public transportation vehicles, as an initial measure has been taken in some provinces as of March 8 [7]. The Ministry of Transport and Infrastructure announced that flights to countries deemed dangerous by the number of cases were suspended starting from March 14 (March 14: Germany, France, Spain, Norway, Denmark, Belgium, Austria, Sweden and the Netherlands, March 16: Egypt, England, Ireland, Switzerland, Saudi Arabia and the United Arab Emirates, March 21: 46 more countries [8-9]).

Following that, The Ministry of Internal Affairs announced on March 16 that event and entertainment venues, cafes, and bars would be closed temporarily [10] and on March 21, a curfew for 65 and older citizens and citizens with chronic illnesses [11]. No complete lockdown has been declared in the country so far. However, short-term curfews were declared, especially covering weekends and national holidays.
After the first official case announcement in mid-March, the number of cases increased rapidly across the country. It announced on September 21 that 28,601 active cases, 1,743 new daily case and 7,574 total coronavirus deaths in the country with almost 85 million population. Furthermore, The Health Minister stated that 60% of the cases were in Istanbul, with a population of approximately 16 million [12]. The Covid-19 outbreak had essential impacts in Istanbul, considering transportation. Before the first case was confirmed, between March 2-6, the average number of daily passengers in public transport was 7 million 505 thousand 188, while this number decreased by 82.7% to 1 million 299 thousand 325 between March 23-27. In the transitions between the European and Anatolian sides of Istanbul, a decrease of 52.8% was recorded after March 11. The average number of vehicles per route in the main arteries decreased by 35.8% [13].

According to studies, while individuals who preferred to use private vehicles in transportation throughout the country were 34% before Covid-19, after Covid-19, they reached 66%. The percentage of those who prefer public transportation such as buses and metro before Covid-19 decreased from 56% to 24% after Covid-19 [14]. As it has been observed worldwide, incentives and policies that aim to promote the use of public transport, are an essential issue to be addressed in Turkey too. However, the epidemic uncovered new potentials for sustainable modes of transport. New bicycle road tenders were opened in Aegean and Mediterranean coastal cities, Muğla, Seydikemer Municipality, Antalya, Kaş and Kalkan Municipality. Gaziantep, Şahinbey Municipality announced that it would distribute 10,000 bicycles to students. Besides, Izmir Metropolitan Municipality Mayor, Tunç Soyer announced that a 25-kilometre bike lane would be built in the main arteries of the city [15]. Istanbul Metropolitan Municipality, on the other hand, initiated the first pop-up bicycle lane of Turkey [16]. The construction work has been started of the 3 km pop-up bicycle road in Istanbul on Saturday, May 16.

4. Potentials Discovered

4.1. Bicycle and Pedestrian Friendly Streets

Cycling is not only a great way to stay healthy (not only in times of the Covid-19 outbreak), it is also a suitable alternative to gyms, which in many cities had to close. However, cycling is also an effective way to support physical distancing and to relieve the burden on public transport during a pandemic. Early on, Denmark released recommendations for public transport users, among which the first recommendation is to walk or cycle if possible. In Germany, the Minister of Health Mr Jens Spahn stressed that people should avoid public transport and instead should cycle more in order to reduce risks of infection. Even though cycling, besides being a healthy and sustainable means of transport, is a good way to release pressure from public transport systems, it is also important to induce a shift from private car usage to cycling but also walking to ensure the health of people and allow them to conduct physical activity safely [3].

Against this backdrop, the topic of pop-up bike lanes has developed great momentum in recent weeks. Pop-up bike lanes are temporary bike lanes that enable social distancing by providing more space for cyclists on the one hand and relieving the public transport system on the other. As part of the Tactical Urbanism movement, pop-up bike lanes are characterized by fast decision-making, trial and error approach and fast implementation, which is made possible by available building materials, materials for construction site equipment and marking. Besides, as cycling contributes to small-scale local businesses and an urban environment integrated with the public & green space, it is also essential to address this potential in the context of the second potential on the agenda, green recovery.

The first major approaches were realized in Bogotá, in particular, to relieve the Transmilenio-BRT system. Many cities have adopted this concept, including Berlin, Lima, Tirana, Paris, Brussels, etc.; the first
technical guidelines were also developed very quickly to ensure the process is technically and legally sound. Examples include Making Safe Space for Cycling in 10 Days: A Guide to Temporary Bike Lanes from Berlin and Ciclovía Recreativa Implementation and Advocacy Manual. These pop-up bike lanes have the potential to be transformed into permanent cycling infrastructure and thus contribute to more equitable use of space in the cities [ibid.].

Equivalent to pop-up bike lanes, cities like Berlin, Oakland, Milan, and Paris, have implemented concepts to create more space for pedestrians, children’s play (and cycling) – broadly under the title of openstreets. This is particularly relevant against the background of the restrictions on going out caused by the lockdown and thus the reduced physical activity: Through openstreets, people in densely built-up areas are given the opportunity to stay at a safe distance outside buildings and still be close to their homes. For more ideas on openstreets please check our publication Open Streets – Streets for People and the guideline by Safe on the Road [ibid.]. Policies based on new cycling alternatives, and reclaiming street spaces for pedestrians in both Tunisia, Turkey and general MED Region have great potential to provide Covid-19 resilient urban transport systems, public spaces and economies. For example, the inspirational works from Cairo by UN-Habitat & ITDP, and the cycling focused projects in several cities in Turkey by WRI pave the road for future initiatives.

4.2. Green Recovery on Transportation

The issue of the financial viability of public transport has come to the fore as the second important factor for providing sustainability of the sector under the pandemic, considering the dramatic decrease in mobility changes in MED Countries. Meanwhile, there is a potential revival thread of private vehicle ownership and use, especially in countries with high car dependency and inadequate public transport infrastructure. Therefore, while addressing the pandemic focused issues, it is essential not to forget the climate crisis, which is a vital issue that we have been facing even before the pandemic. Moreover, it is fundamental to develop a comprehensive approach that addresses and responds to two different vital issues at the same time.

In the wake of the initial easing of containment measures in many countries, the political discussion is focusing increasingly on the design of stimulus programs to support the economy and promote environmentally friendly economic recovery. Against the backdrop of falling tax revenues, the focus should shift more strongly to cost-efficient economic stimulus measures in addition to large-volume investment programmes. Instead of planning additional funds, several levers can be used, especially in the transport sector, to reduce existing subsidies (e.g. diesel taxation) and to leverage savings potential in terms of «green» transport infrastructure [3].

Under the banner of Green Recovery, UN Secretary-General António Guterres calls on governments to use their stimulus packages to create more sustainable, resilient and inclusive societies («build back better»). This is supported by leading economists such as Nobel Prize winner Joseph Stiglitz and climate economist Nicholas Stern. According to a recent study by the University of Oxford, green Covid-19 recovery packages are better suited to boosting economic growth and halting climate change than a return to old routines. A green restart is an opportunity to shape the 21st-century economy in a way that is clean, green, healthy, safe and resilient [ibid.]. Besides, the calls and open letters of non-profit advocacy organizations on transport, such as UITP, are valuable tools to raise awareness and trigger actions on funding transportation by cooperating EU Organizations, which focus green finance based solutions for coping with the losses of Covid-19 outbreak. Apart from stimulus packages, other resources of public transport funding alternatives should be explored. Thus, especially Mediterranean countries with high economic vulnerability may have the opportunity to carry out works regarding both epidemic and global climate crisis with effective policies.
5. Transferability of the Potentials Discovered & A-S-I Approach into the MED Context

5.1. Regional Limitations

In light of these significant potentials, it is necessary to review the regional limitations to develop more feasible and localized policies for the context of Mediterranean countries - especially considering the developing countries in North Africa, Southeast Europe and Middle East geographies. Therefore, the following constraints covering different aspects are presented;

![Figure 4. Regional limitations](source:Authors)

5.2. Recommendations

To conclude, the following A-S-I based recommendations – with some existing inspirational examples from the MED Area - are given a place. Furthermore, considering the regional limitations, a holistic and comprehensive policy and action plans are provided.

1. **Reduction of (motorised) transport demand (Avoid):**
   - Promotion of compact resource and space-saving, human-centred accessible, barrier-free, mixed-use oriented cities instead of suburbanisation and respective urban sprawl ([urban planning approaches from Paris, Barcelona](source:Authors)).
   - Promotion of remote working and learning, resulting in reducing traffic volumes and congestion, in particular reducing the number of commuting journeys to work by between 20 per cent and 40 per cent and equalising traffic ([a developing platform supports remote working & learning in Israel](source:Authors)).

2. **Promotion of public transport and active mobility (Shift)**
   - Promotion of safe, reliable, affordable, accessible and high-quality public transport, cycling and walking (including infrastructure, services, safety and education) as a resilient means of transport ([Lisbon, Paris, Milan, Istanbul, Athens](source:Authors)).
3. Improving the quality of transport (Improve)

- Provision of “mobility bonus” instead of “car bonus”: Mobility bonuses for sustainable mobility solutions such as public transport, (e-)bicycles, cargo bikes, company bicycles, e-bike charging stations among others (Barcelona).
- Linking the promotion and implementation of transport measures to increasing energy efficiency and mitigating CO2 emission (Germany’s recovery plan [3]).

Technological innovation and in particular digitalisation are important elements to achieve improvements and developments in all three fields of Avoid, Shift and Improve. Furthermore, the discovered potentials, pedestrian and bicycle-friendly approaches and green stimulus packages as complementary actions in the transport sector should all be closely aligned with the Avoid-Shift-Improve paradigm. In order to relieve the regular public transport at this point, possibilities such as the construction of temporary cycling infrastructure or the limitation of private car use (to free up space) should be used. To prevent the private car tendency in transport in the region, innovative, holistic and resilient strategies need to be developed towards sustainable urban development and transportation planning together.

- The resilient, consistent and environmental policies,
- Social awareness campaigns and activities specifically addressing the vulnerable groups in society,
- International collaborations to provide capacity development & financial resources,
- Geography and climate-specific tactical solutions (urban furniture, shading systems)

are the main issues that developing countries in the Mediterranean region should address to promote public transport, cycling and pedestrian mobility against Covid-19. Besides that, as a complementary geography-specific best practice-based resource, the Big Cities, Big Challenges: Sustainable Urban Transport across Major Middle East and North African Cities can be included.

An essential element of the strategy is the sequencing of measures - here, administrations from the areas of health, transport, safety, etc. must work together. Besides that, the actions taken in the context of the corona crisis are both fair (in terms of social participation, gender and generational equity) and support the objectives of transport transformation in the long term [ibid.].

* TUMI is the leading global implementation initiative on sustainable mobility formed through the union of 11 prestigious partners: Asian Development Bank, Germany Federal Ministry of Economic Cooperation and Development, C40 Cities, Development Bank of Latin America, GIZ, ICLEI, Institute for Transportation and Development Policy, KfW, SLoCaT, UN-Habitat, and WRI. We are united in one goal: changing mobility for the benefit of people and the environment, with a view to the future. TUMI supports transport projects all around the world and enables policymakers to transform urban mobility. We base TUMI on three pillars: innovation, knowledge, investment. We support innovative pilot projects around the world. We share knowledge with planners about modern mobility concepts, in workshops and conferences. We invest in the construction and modernisation of sustainable urban infrastructure. You can check our website and learn more about us.
References


The recent coronavirus crisis threatens the health, economies and societies of all countries, regardless of level of development. In the South Mediterranean countries the fight against the pandemic is even more complicated. It must be done with limited health and economic resources compared to other regions. In addition, it takes place in a unique social and geopolitical context.

Cooperation and EU-Med strategies in key sectors are needed. Therefore, CMI and FEMISE have decided to join forces and launch this series of Policy Briefs to pave the way for thematic analyses and prescriptions, which will be explored throughout this series.