INTRODUCTION

So far, the Covid-19\(^1\) pandemic has placed over four billion people in lockdown. With mobility limited, it has drastically impacted public transport networks across the world. The impact has resulted in the decrease of farebox revenues (in some cities the reduction in patronage surpasses 90%) and brought with it additional costs to disinfect and implement physical distancing measures in public transport vehicles and infrastructure. It has also resulted in the reduction in industrial and service production, including the halt of activities and the decrease in turnover of the supply industry, and subsequent deaths and infections among public transport workers.

This Knowledge Brief provides an overview what measures have been taken so far and 10 critical challenges facing the public transport sector. It is important to consider such aspects for resuming operations.

UITP continues its work to support its members in managing the impact of the crisis on the short- and long-term.

\(^1\) Also known as SARS-CoV-2 or coronavirus.
During this pandemic period, a number of measures have been implemented to protect workers and passengers and avoid spreading the virus:

- Ensuring that all workers and passengers receive the latest and most accurate information about Covid-19, including ways to limit and avoid transmission.
- Providing staff in all occupational groups with adequate personal protective equipment (PPE) including gloves, masks, hand sanitising products and other appropriate materials.
- Regular deep cleaning and disinfection of public transport vehicles, workplaces, stations and assets coming into contact by users include ticketing devices, poles and seats.
- Making disinfectant dispensers accessible for workers and passengers.
- Limiting the interactions of drivers and other public transport workers with passengers (for example no cash ticket sales onboard, allowing rear-door boarding only, covering the drivers area with a plastic sheet, cancelling in-person ticket inspections, etc.) as well as limiting physical interaction between colleagues within the company in line with safe distancing standards.
- Maintaining high levels of service despite the reduction of travel demand to ensure safe distancing while keeping service continuity.
- Adapting and regularly communicating services and timetables changes to comply with decisions taken by public authorities (for example night services and school services are suspended in some cities, some networks are following weekend or school holidays timetables as agreed with trade unions, offering new on-demand services).

Providing dedicated services to healthcare personnel, patients and any other category of the work force falling under essential services.

Communicating on all the measures being implemented to ensure safety to reassure workers and passengers.

Though the pandemic is still active, it is important to anticipate the progressive lifting of the lockdown and prepare to swiftly resume operations in due time. The key challenges facing the sector have been identified and further discussed.

ADDRESSING HEALTH ISSUES

1. Safe distancing

The lockdown has made it possible to respect safe distancing between passengers due to the low ridership. In the post-lockdown phase the same level of safe distancing will be very difficult, if not impossible, to implement. Will this be required post-lockdown? The analyses carried out in the different modes of transport conclude that, if it is necessary to ensure social/physical distancing between one and one and a half metres, the transport capacity would only be 25-35%, which would hardly allow transporting a part of occupational demand. In addition, it is necessary to take into account the difficulty of ensuring this compliance at peak times, as well as at modal exchange points. In practice, even with the help of the police, this physical distance between travellers cannot be guaranteed, neither in vehicles nor in stations and their surroundings. And it is not possible to triple that offer in the short- or medium-term, even if the necessary funds were available for the related investments.

It’s important that the debate on safe distancing doesn’t lead to a stigmatisation of public transport and, by default, encourage increased car use. The perceived risk of
using public transport in a post-lockdown world do not by any means discount the absolute and definite dangers of regular personal car usage. This discussion must involve mobility stakeholders including public transport authorities and operators.

2. Masks
In combination with other measures, many organisations believe wearing masks in public spaces is the best way to limit the need for safe distancing. Will wearing masks be compulsory in public spaces? Are they available for citizens? Will it be mandatory in public transport systems? And will it then cancel the need for safe distancing which would make it possible to travel in pre-Covid-19 conditions? The power to enforce the decision and control the wearing of masks is key. Many cities/countries have implemented the recommendation to protect nose and mouth or to wear masks. Elsewhere, this is already an obligation: this is the case of Czech Republic, Luxembourg and Germany, where enforcement and fines are applied by the police. In Vienna, masks won’t be distributed by Wiener Linien, the local operator, who wouldn’t have the power to penalise violations, but will recommend people use them.

If wearing masks makes it possible to lift the physical distancing restriction, then this rule should be applicable to all communal areas. Singling out public transport infrastructure will only suggest the incorrect notion that public transport is riskier than other communal spaces. In France, the National Academy of Medicine, has called for masks to be obligatory in public spaces.

3. Infected vs. healthy people
Some countries consider a wide range of measures aiming at better identifying infected people in public spaces, even though high numbers of infected people are asymptomatic. Some consider lifting the lockdown first for certain categories of the population, for example Covid-19 immune people or people below a certain age. Tracking apps which aim to identify infected people are being considered, as well as the possibility to share data on personal movement with public authorities. Monitoring people for symptoms such as thermal detection technologies is being considered.

In Wuhan, travellers can enter metro stations only after scanning a QR code linked to a ‘health code’ app showing they are symptom-free. Once on-board they scan another code recording the exact vehicle ridden on, to allow for contact tracing in case of a re-emergence of the virus.

There will be very big challenges for the operators to be able to implement these measures in public transport networks and enforce them. Clear information from the health authorities, enforcement and procedures defined and clearly communicated by the competent authorities is key.

4. Liability
All of the challenges above provide a strong message for authorities: whatever mobility restriction and sanitary measures will be defined and imposed should be done in coordination with the sector and the responsibility to enforce them is with the authorities. Public transport stakeholders, provided they are given the appropriate means, will collaborate to implement changes either for imposing physical distancing, wearing masks or for filtering access to certain users. In this regard, public transport stakeholders should bear no liability in case passengers do not respect the sanitary measures.

RESUMING PUBLIC TRANSPORT OPERATIONS & BUSINESS

5. Restoring trust
Due to the crisis, public transport has been suffering a deteriorated image and is likely to continue in the coming months. In Wuhan, the modal share of buses and metros has dropped from 56% to 24% in the days following the lifting of the lockdown. It is important to restore trust amongst travelers and reassure them about the impact on health. In this regard, cleaning and disinfection standards adopted during the crisis should continue and be reinforced with innovative cleaning technologies. Equally
crucial is being sensitive to the public’s skepticism after an unprecedented lockdown period. Campaigns communicating sanitary measures, conveying a positive image of public transport and emphasising its benefits will be needed. As much as possible, actual cleaning actions should be made visible by public transport operators when passengers are onboard or on the platform.

Attractive and targeted offers may have to be introduced to encourage the use of public transport. A possible increase in fare evasion and insecurity acts due to less inspection will have to be considered too.

However, promoting the use of private cars further damages the image of public transport. A strong political push is needed for sustainable transport use, to counterbalance the desire to travel privately. An increase in private transport will have a negative effect on public health, safety, the environment and economy.

6. Demand management

The need to limit crowds and human density in urban areas is an incentive to move towards a different time schedule of economic and social activities. This would limit and change the impact of peak hours and allow to better manage the demand in public transport networks. Work from home and teleworking will certainly be kept in the short- and medium-term to avoid new infection peaks. Also, staggered work and schooling hours should be considered to better distribute the mobility demand over time.

The Mayor of Milan communicated the need for services such as school, universities, factories and shops to start at different times. Moreover, improving the coordination of scheduling across modes should reduce waiting time and stationary time at stations and interchanges.

During a transition phase, public transport networks and services may have to be reviewed to better serve the demand impacted by the lockdown context. Routes and frequencies of some lines are being readjusted to minimise crowds on-board and/or to better serve some destinations (hospitals or supermarkets for example). For instance in Honk-Kong MTR maintains the frequent peak hour service, even though the daily patronage has dropped by around 40%, to reduce train loading. On-demand routes may have to be introduced and services reserved for health care personnel may have to be extended during the transition period. Should some of these transitory measures remain on the long-term and transform the structure of public transport services?

Limiting crowds in stations and vehicles may also be possible by operating with reduced headways. Beijing is looking into the possibility of creating a booking system to reserve 30 minutes slots to enter stations, related to information of the service schedule. This would contribute to managing the surroundings of stations. Moreover, on-demand app-based transport services could be a way to manage the demand and track passengers. Such apps could be encouraged for taxi services.

7. Public transport workforce

Measures adopted for the protection of public transport workers during the pandemic will have to be extended including providing staff with adequate personal protective equipment (PPE), reducing direct contact between staff and passengers, checking temperature and using any other system of monitoring for possible symptoms, keeping up remote work and encouraging video-conferencing when appropriate.

One very important point, especially for frontline workers, would be to keep their motivation high after the crisis. Internal communications will be very important as well as the necessity to take special care of sick employees and families of victims.

Some operations, in particular for maintenance tasks and infrastructure works, may have to be reviewed to integrate safe distancing requirements. These requirements could also be seen as an opportunity to rethink customer service, for example by deploying AI chatbots like Tokyo Metros Bebot, or accelerating the deployment of contactless payment or mobile ticketing. Public transport companies will also need new skills in terms of managing operations in a context of pandemics.
In addition, measures allowing only some immune staff to come back to service could create an issue in the distribution of workforces vis-a-vis the present needs (for example more immune in maintenance than drivers, what do we do?). Organisations who have experienced a high rate of contamination amongst their staff may have to face a shortage of critical workforce.

The crisis has shown the vital role that public transport workers play by keeping continuity of the service and supporting essential services personnel. Many communication campaigns acknowledging this role have been launched all over the world, including UITP’s ‘Guardians of Mobility’. This type of promotion should continue as it appeals on an emotional level by putting public transport employees on the frontlines in the spotlight, and conveying a human dimension of public transport. It also presents a rare opportunity for employers to join forces with the unions.

8. Supplying industry
The disruption experienced by the supplying industry during the crisis can have an impact on the provision of maintenance services and spare parts to public transport networks. Will this situation have an impact on the re-starting of operations? Moreover, industry suppliers will have to control costs to balance the lack of revenues due to the crisis. As we are seeing in many countries, termination of employment is a risk. Other expenses such as R&D might be impacted, and innovation in non-essential domains slowed down.

It is also important that the dialogue between industry, operators and authorities is continuous and efficiently in place, in order to rapidly identify the technology and solutions that can support and facilitate the different actions necessary for this re-start (e.g. tracking apps).

9. Financial and institutional support
In order to limit the social, economic and financial consequences impacting public transport, exceptional measures will need to be adopted by governments and supranational institutions prioritising political and financial support for sustainable urban modes of transport. These measures, taking the form of a stimulus package, should cover public transport companies and the supply chain industry. Public transport relies on passenger revenues, their sheer survival in the short term is at stake, particularly in countries where fares is the sole source of income. Moreover, adopting safe distancing measures—with a significant impact on the supply—and introducing disinfecting practices will lead to an increase of operating costs.

Despite contractual re-equilibrium processes, should service contracts be reviewed by public transport authorities to soften certain requirements and define transitionary compensation methods? In the European Union, the public transport sector is seeking assurances that these modifications would be possible under the current rules set out by Regulation 1370/2007 on public service obligations as well as by the public procurement directives (2014/24/EU and 2014/25/UE). Naturally, these re-equilibrium processes under the same initial contract, should only be possible within a limited time frame. With public finances stretched, it is even more important to ensure value for money and lucrative outcomes as well as the proper application of the PSO Regulation in the long run. For example, in Dublin, the organising authority has turned Transdev’s contract to a ‘cost+fee’ contract where operating expenses will be covered in addition to a flat-rate remuneration.

Tax exemptions, support for liquidity and bonds, and moratoriums on debt reimbursements should also be considered. These mechanisms should also be made available to local public transport authorities, as they are the ones that often shoulder the risk of revenue losses. The option of loans without interests could also be interesting for the duration of the state of emergency and over the subsequent months.

Despite all of the support, some operating companies or individual owners risk bankruptcy during the crisis. For example, in Istanbul more than 80% of bus vehicles are owned and operated by individuals. What will happen if they cease operations?

The Covid-19 crisis should not make one lose sight of the persisting climate and ecological crisis. Building momentum to fight this battle has to stay high on the political
CONCLUSION

Due to the diversity of regulatory frameworks and the differences of people’s acceptability and culture, the type of measures and the pace of implementation may differ from country to country. Nevertheless, as expressed above, the return to ‘normality’ in public transport systems will depend largely on the decisions taken by the competent authorities and their own capacity to control them, with regard to mobility restrictions and sanitary measures. In this context, it is important to advocate the sector’s specificities.

UITP will encourage knowledge sharing, relay the sector’s views at an international level and support its members to do it vis-à-vis their public authorities.

agenda. The lesson from the Covid-19 crisis is that early action is essential – just like the fight against climate change. Therefore, we need to maintain ambition in order to continue cutting emissions and mitigate the risks and costs of inaction from climate change and other sustainability risks.

As the economy recovers, it should be steered towards a ‘Green Deal’ compatible growth. We should resist the temptation of short-term solutions in response to the present crisis that encourage people to leap back into their cars. The use of public funds in the recovery will be immense, and now is the time to make the right political decisions. Without clear conditions for using those funds in favour of a modal shift, we risk locking our cities in an unsustainable model of mobility for decades to come.

Initiatives such as Milan’s aiming at introducing one of Europe’s most ambitious scheme reallocating street space from cars to cycling and walking, besides public transport, in response to the Covid-19 crisis, should be encouraged and replicated. Confinement and lockdown measures have forced people to stay in close proximity to their houses. Local planning rules should be modified to ensure that facilities are available and accessible in close proximity, thus reducing the need for car travel and favouring sustainable travel.

This is an official Knowledge Brief of UITP, the International Association of Public Transport. UITP has more than 1,800 member companies in 100 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as the development of policy for mobility and public transport worldwide.

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