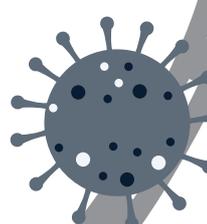




**“STANDARD  
OPERATING  
PROCEDURES (SOPs)”  
FOR  
BUS TRANSPORT  
POST COVID-19  
LOCKDOWN**



# 1 OBJECTIVES



Provide essential mobility services post lockdown



Maintain desirable social distancing between the passengers inside buses, at bus shelters/terminals and interchanges



Safety for on-board crew i.e driver and conductor as well as at Depot & terminals



To establish the trust of the passengers on public transport as safe mobility choice

# 2 TIMELINES



3

MONTHS POST LOCKDOWN  
and to be reviewed thereafter

# 3 SOPs FOR OFFICES/MARKETS/ WORK ZONES/EMPLOYERS

Passenger demand for public transport is the derived demand due to the location of the jobs, markets and other "trip attracting land-uses". To achieve the mandatory social distancing inside buses, the occupancy at a given point of time (e.g. peak hour) should be less than one third of the occupancy during the normal days. To achieve this, it is important that passenger demand at these "trip attracting land-uses" should be controlled by:

## Promoting work from home for IT, IT allied, other possible establishments

Teleworking is one of the popular travel demand management strategies of recent times. Various large organisations allow their employees to work remotely or work from their homes to reduce the need for travel. It is highly popular in large metropolitan areas where travel time is generally higher which impacts the overall performance of the employees. During the lockdown, majority of the employers suggested their employees to work remotely until better situation prevails. It is suggested that all the employers in the city should continue these efforts for a period of 3 months after the lockdown is lifted to avoid another wave of spreading the virus.

## Staggered working days/hours for establishments and commercial centers

The establishments that require mandatory physical presence of employees and frequent visits of general public as visitors, should try to adopt staggered

working hours, and if possible, staggering of opening days. This will help:



Reduce possible crowding in mobility services and spread-over the peak demand for longer duration



Decrease gatherings in public spaces/entry/exit points



Assist establishments in better management of crowd within their premises



Support equal distribution of demand and ensuring public can access all the places while maintaining necessary safety standards

Various institutions which can adopt this strategy include:



Wholesale markets, shopping centers including vegetable and meat markets



Government institutions where work from home cannot be adopted



Special Economic Zones (SEZs) and Industrial centers where work from home cannot be adopted



IT companies (to the extent possible they should adopt work from home)



Hotels and restaurants

Accordingly, a zone wise timetable should be prepared for all the establishments which is to be followed for the next three months. If required, minor changes can be made based on field observations from time to time.

# 4 SOPs FOR BUSES AND TRANSPORT AUTHORITY/OPERATOR

 To start with, ensure no reduction in supply of buses and frequencies than normal operation. Any change should be reviewed after initial operation

 For standard size 12 m bus, maximum allowable total passenger capacity should be 18-20 while for midi buses, it should be 12-14

 Disinfecting buses after completion of every trip is important

 If possible, increase supply of buses/frequency on high demand routes (from historical data of normal operational days) by hiring additional buses from schools and private bus operators

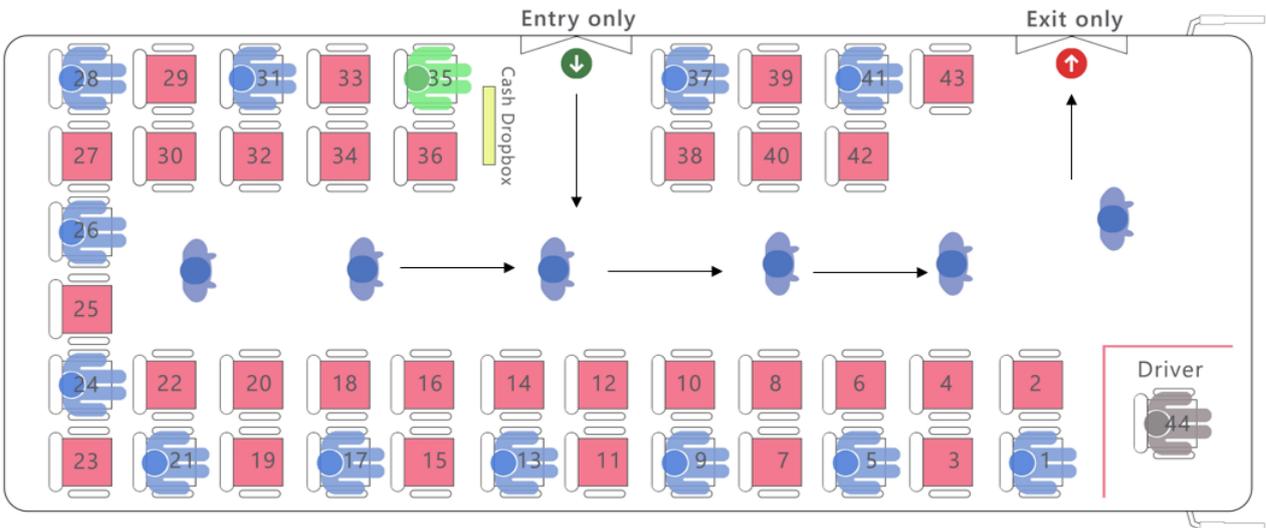
 Provision for marking of seats and standing locations for passengers to maintain requisite social distancing

 On-board CCTV cameras should be used to monitor the social distancing inside the buses and in case of any non-adherence, on-board crew should be communicated and notified

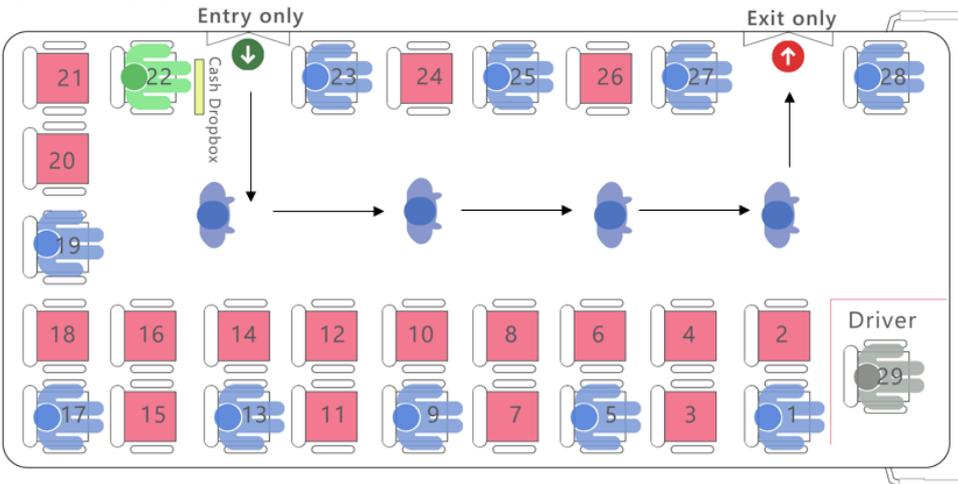
 Allow rear door for boarding and front door for alighting of passengers to avoid physical contact between them

 Use of air conditioner in buses should be avoided, as it can help the virus survive for longer period. Since the virus can survive in the air for sometime, opening windows help achieve rapid air exchange.

## 12m BUS



## 9m BUS



-  Transparent curtain separating driver's area
-  Restricted Seats
-  Conductor
-  Permitted Seats
-  Standing

A typical layout of 12m (standard) and 8-9m (midi) bus, marking passenger location, unidirectional movement, seating of conductor and location of cash drop box

## 5 SOPs FOR PASSENGERS



Mandatory for the boarding passenger to cover their mouth with a mask, cloth (as per Government advisory). Failure of which, a passenger must be denied entry into the bus



Use the notified door for boarding & alighting and marked location for seating/standing

## 6 SOPs FOR BUS DRIVER



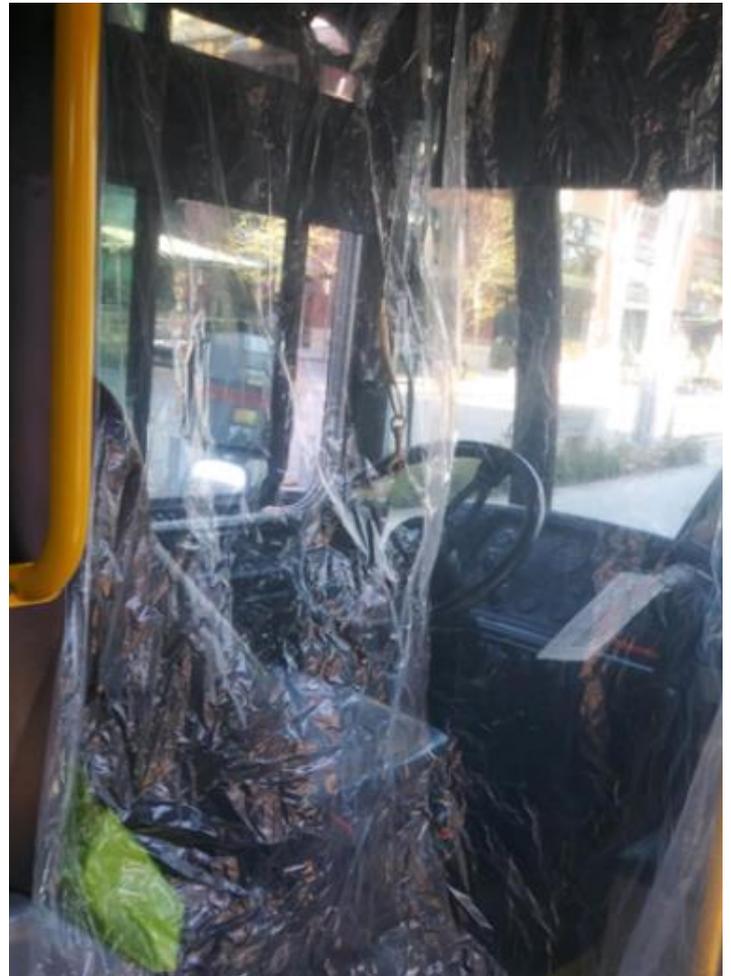
All drivers (and other onboard staff) should have their temperatures checked before taking up their duty on a shift basis



To minimise physical contact between driver and passengers, driver area can be separated by using a transparent screen/curtain



Mandatory use of mask and gloves by the driver (protective clothing if made available)



Transparent curtain separating driver's area  
(Source: TriMet, Oregon)

## 7 SOPs FOR TICKETING AND CONDUCTOR



All conductors (and other onboard staff) should have their temperatures checked before taking up their duty on a shift basis



Mandatory use of mask and gloves by the conductor (protective clothing if made available)



Provision of hand sanitiser with the conductor



To the extent possible, conductor should not be entrusted with issuing tickets/cash exchange



Role of conductor should be of a "crowd manager" inside the bus and at halt locations



Further, to minimise cash exchange, authority can decide to have a flat fare for all passenger trip lengths (Rs 5 or Rs 10) and provide a cash drop box near the conductor



Simultaneously, authority may issue monthly/three monthly passes (paper as well as digital) against a lumpsum amount



Authority should encourage digital ticketing by using smart card or mobile phones. In the absence of any such digital facility with the authority, they can utilise the service of various start-ups providing similar services, (paytm, chalo etc.)



For senior citizens, bus rides may be made free considering they will have less mobility options and may not have smart phone to pay through digital wallets

## 8 SOPs FOR BUS SHELTERS



Physical distancing should be made mandatory for passengers through advertisements and floor markings at all bus shelters



Frequent and regular sanitisation of bus shelters

A typical CRUT bus shelter with social distancing message, one passenger seated per seat and with floor markings for passengers to wait at a bus shelter (Source: GIZ/ CRUT)

## 9 SOPs FOR BUS TERMINALS/DEPOTS/INTERCHANGES



Buses parked inside a terminal in Peñalolén, in Santiago province



Buses should stop at a minimum distance of 5 meters from each other at marked locations, to avoid crowding of passengers



Crowd management by deploying additional staff, since the number of passengers will be large at such locations



Frequent and regular sanitisation of terminals/depots/interchanges



Social distancing at Woodlands Interchange (Source: The Straits Times – Singapore)

# 10 SOPs FOR PEDESTRIAN/CYCLIST INFRASTRUCTURE



Identify major junctions, streets and public spaces which may experience frequent crowding



Proper instructions should be provided to the users of public bike sharing (PBS) which should be used after sanitizing the hands. PBS stations should also have provision of hand sanitizers



Since people would prefer to use individual modes like cycles and walking, lanes on both sides should be temporarily reserved to create walkways and cycle lanes by reclaiming streets



Evaluate the possibility of reducing road width temporarily by bollards, traffic cones or paints. Accordingly, increase the width of footpath by minimum 2.5 m on both sides

## TEMPORARY RECLAIMING

of public realm for pedestrians to maintain physical distancing. #covid 19



BEFORE



AFTER

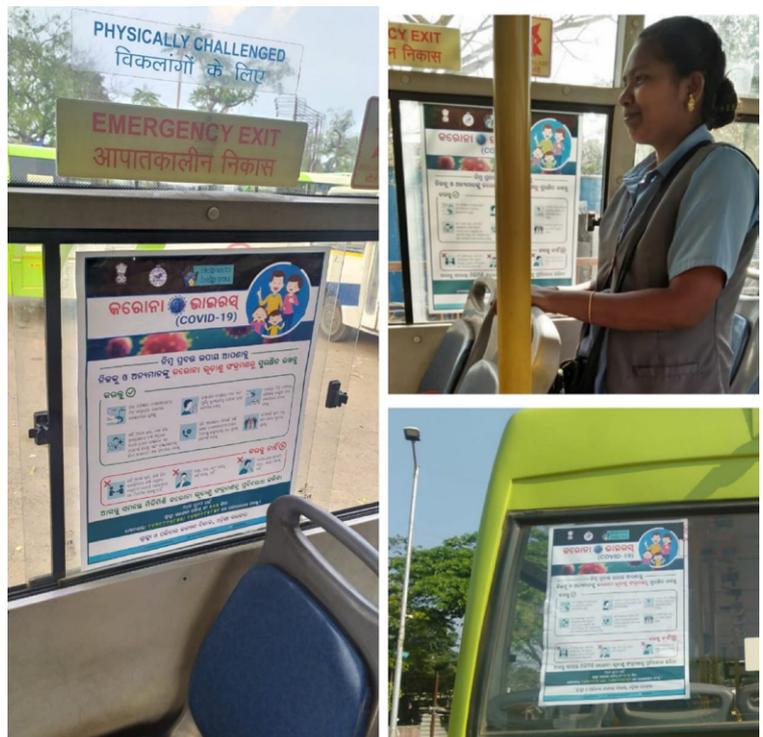
Plans for the Strade Aperte project at Corso Buenos Aires, Milan. (Image courtesy: The Guardian)

# 11 BETTER INFORMATION TO PASSENGERS AND COMMUNICATION WITH STAFF

Protecting passengers is a very important measure to maintain people's confidence in bus transport. Measures must, therefore, be effective, adequately accessible, clear and logical in terms of communication. Information for passengers on standards of conduct (such as maintain social distancing, not using bus when showing symptoms such as fever & cough, hygiene practices, digital payment etc.) shall be disseminated through various channels such as news, public advertisements, posters, social media platforms. Effective usage of video messages can enhance outreach and accessibility for users.

Information on bus routes availability, timetable adjustments shall be provided. A direct and transparent communication of those adjustments of schedules, timetable and intervals shall be communicated to passengers in order to ensure public transport system and operation effectiveness, reliability, trustworthy and convenient.

Further, Authority needs to ensure a two-way communication channel with the bus crew through command and control centre. Crew should be briefed and trained about the SOPs and safety precautions.



Awareness posters in buses Source: CRUT, Bhubaneswar





Sanitization of bus in progress (Source: CRUT, Bhubaneswar)



Measures listed out in the document should be implemented after assessing the aftereffects of COVID19 in the state. These measures are suggestive and should be used in combination with various instructions issued by Government time to time.

Integrated and sustainable urban transport systems in Smart Cities (SMART-SUT)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
2nd Floor, B-5/2; Safdarjung Enclave  
New Delhi-110029  
INDIA

T + 91 (0)11 4949 5353 Ext. 2252  
F + 91 (0)11 4949 5391

E [laghu.parashar@giz.de](mailto:laghu.parashar@giz.de)  
I [www.giz.de](http://www.giz.de);