EPCA report no. 19 (March 2006)

Status report on implementation of the High capacity bus system in the NCT of Delhi

In response to the Hon'ble court's order dated November 30, 2005

In the matter of W.P.(C) No.13029 of 1985; M.C. Mehta v/s UOI & others

1. The report contains the progress made on the implementation of the HCBS since Hon'ble court's order dated November 30, 2005

2. The report lists the issues that have been resolved and issues that are yet to be resolved before the implementation of the first corridor

3. The report discusses the progress made on the reports on integration of different modes of transportation systems and various other modes of transportation

Environment Pollution (Prevention & Control) Authority for the National Capital Region

1. Introduction: the impending mobility crisis in Delhi

EPCA over the years has been working on augmentation/improvement of the public transportation systems in the NCT of Delhi. With the phenomenal growth in vehicular trips per day and the unavailability of adequate public transport systems in the Delhi, more and more people are adopting the personalised mode of transport with its resultant consequences. The future looks even more ominous, as is evident from the graph below, which clearly shows how the intra-city vehicular trips per day in Delhi will grow.



Source: Anon 2005, Integrated Multi-modal public transport network for the NCT of Delhi, Final Report, RITES Ltd, New Delhi

According to a RITES study of September 2005, between 2001 and 2021, the population of Delhi is estimated to grow from 13.8 million to 23 million. In the same period the intracity vehicular trips per day are estimated to grow from 12 to 24.7 million. Adding about 15 per cent inter-city trips, the total trips to be catered to by 2021 will be about 28.7 million per day. Assuming that 80 per cent of these trips should desirably be carried by public transport, the total number of vehicular trips to be catered to by public transport by 2021 is 23 million. According to this report, the present bus services, Metro Rail and the Integrated Rail-cum-Bus transit (IRBT) system if implemented as planned together are estimated to carry about 15 million trips per day must be additionally catered to by other modes of public transport. It thus becomes imperative that augmentation of public transport takes place in tandem with the growing vehicular trips in the city.

2. Background to the public transport projects

EPCA has earlier, at various instances, pointed out the imperatives of restricting the growth of private mode of transport and augmenting the public transportation systems in its various reports to the Hon'ble court. The last EPCA report pertaining to this issue *"The imperative of controlling vehicle numbers and increasing access: Report on public*"

transport projects in Delhi" was submitted on July 2004. The report highlighted the phenomenal growth in the private mode of transport in Delhi and the importance of implementing the High Capacity Bus Systems (HCBS) and other modes of public transportation as envisaged by the Delhi government with a time bound implementation schedule.

The Hon'ble court in its order dated August 12, 2005 stated:

"We have heard learned counsel for the parties, perused the affidavit of Mr. S.N. Sahai, Secretary-cum- Commissioner, Government of NCT of Delhi, Transport...We do hope that by the time buses are ready to be used, the corridors are ready from every angle avoiding the possibility of parking the buses in garages without use. These aspects are not very clear from the affidavit of Mr. Sahai. Let all these aspects be examined and further affidavit be filed within a period of two weeks."

The Hon'ble court in its hearing of November 29, 2005 wished to have a fixed time bound implementation schedule for the HCBS from the Delhi government. Accordingly in its hearing of November 30, 2005, the Hon'ble court passed directions on the implementation of the HCBS in the NCT of Delhi with fixed time-bound implementation schedule and the relevant deadlines.

The first deadline for the existing corridor from the Ambedkar Nagar to Delhi gate was as follows:

Feasibility/design: Expenditure Finance Committee approval: Tendering Process: Construction Period: already completed by December 31, 2005 by February 28, 2006 18 months (by August 2007)

For the implementation of the HCBS the court in the same order also pointed out, "In case of any difficulty to the implementation of the aforesaid time schedule, which has been provided after discussion with Mr Madan, the matter shall be brought to the notice of EPCA by the transport department and the EPCA shall forthwith file a report in this court and seek further directions."

Over and above the issue of implementation of the HCBS, the Hon'ble court in its order dated November 30, 2005 also stated: "The EPCA shall also examine the issue of integration of the High capacity bus system with existing public transport system, off course, in consultation with the transport department and submit a report to this court expeditiously. Likewise it shall also give a report in respect of other modes of transport such as Mono Rail and Light Rail Transit (LRT)."

According to the timetable that has been set for the implementation of the high capacity bus system in the city, by end February, Delhi government was to get the approval from the Expenditure Finance Committee (EFC) and finalise the tender process by February 28, 2006. This would give it 18 months to complete the first corridor by August 2007. Work on subsequent corridors would also begin so that the entire project covering 103 km would be completed by December 2009.

The effort of EPCA has been to resolve pending issues through its regular meetings with key concerned agencies involved in the implementation of the HCBS project. EPCA has held meetings with Delhi government department of transport, the Delhi Metro Rail Corporation, RITES, Delhi traffic police, IIT Delhi, CRRI, Northern railways among other agencies on December 3, 2005, December 10, 2005, February 4, 2006, February 11, 2006 and February 25, 2006 to discuss these critical issues. While many issues have been resolved, few issues still require more deliberations.

In spite of considerable progress made in the project, the Delhi government is not in the position to meet its first deadline (completion of tender process by February 28, 2006) and EPCA is doing this report to seek further directions. The report is structured under three broad categories:

- 1. Implementation of the HCBS
- 2. Other transportation systems
- 3. Integration of various modes of transport

3. Implementation of the HCBS

A. Formation of the Special purpose vehicle (SPV)

The formation of the SPV for implementing the HCBS is very important, as it facilitates the implementation of the project. Though it took a long time to form the SPV, EPCA would like to point out that the Delhi government has given its final nod for setting up the SPV. The Cabinet on February 10, 2006 approved the formation of a SPV for the implementation of various multi-modal transport projects in the NCT of Delhi. The SPV, Delhi Integrated Multi-modal Transit Network System, will facilitate the implementation of the various multi-modal public transport projects in Delhi.

The SPV, being a corporate body has flexibility in implementation and operation of the project. Formation of an SPV is thus essential for large public transport project. For example, the Delhi Metro represents the SPV model, which has been able to overcome the drawbacks of completely government owned and operated Metro. The Delhi government has informed EPCA that they are currently working towards operationalising the company and EPCA will review progress on this matter.

B. Approval by Expenditure Finance Committee (EFC)

The approval by the EFC was delayed because of decisions regarding the type of road engineering technology. The EFC while granting its approval for the first corridor on December 28, 2005 had pointed out that cold-in-place re-cycling technology could be utilised for the first corridor. The committee was informed that this technology would considerably speed up the process of road construction and compresses the time needed for the entire project. The Delhi government sought various suppliers and the necessary equipments for this technology. However it was later realised by the authorities that the necessary supplier/equipment for this technology were not available easily and moreover this technology had not been implemented on a large scale, thus questioning the usage of this technology for the first corridor.

The transport department has informed EPCA that subsequently this issue has been resolved in a meeting convened by the Delhi Chief Minister on February 2, 2006. It has been agreed that the EFC will approve of this project based on the available and in-use

road engineering technologies. This critical step for implementation of the first project has also been cleared.

C. Traffic management

The Delhi traffic police in its submission to EPCA of December 31, 2005 have expressed reservations on the implementation of the HCBS, which concern issues of management of the corridor as well as movement of traffic. The issues also pertain to the lanes to be devoted for the movement of the private mode of transport as against movement of public modes of transport, the circulation of traffic at key junction points as well as the movement by pedestrians in the corridor. EPCA has also been informed by the Delhi government department of transport that the Lt Governor has also asked for the issues raised by the traffic police to be resolved before proceeding further with the corridor plan. This has delayed the tender process for the first corridor and the deadline has not been met.

EPCA is thus currently working with the Delhi traffic police, TRIPP, RITES, and the transport department to resolve the traffic flow related problems. EPCA would like to inform the Hon'ble Court that the Transportation Research & Injury Prevention Programme (TRIPP) and the RITES have submitted to EPCA a written response to each of the 24 points listed by the Delhi traffic police on February 24, 2006 and February 21, 2006 respectively. EPCA has requested the agencies to resolve all these issues in a time bound manner and to bring to it any contentious and unresolved issues for its intervention.

EPCA has also requested the Delhi government to begin the process of tendering at the earliest so that the process can work simultaneously - of resolving issues with the implementation of the corridor.

4. Other transportation systems

The Hon'ble Court in its order of November 30, 2005 had stated, "Likewise EPCA shall also give a report in respect of other modes of transport such as Mono Rail and Light Rail Transit (LRT)." EPCA accordingly is working with the agencies in evaluating and understanding the various other modes of transport for implementation in the NCT of Delhi along with the Metro Rail and the HCBS. EPCA has held meetings with key agencies on December 3, 2005, February 4, 2006, and February 11, 2006.

It has been brought to the notice of EPCA by the transport department that the Delhi government apart from the implementation of the Metro rail has also initiated action towards introducing multi modal transport system in Delhi. It is currently working towards the implementation of the HCBS, which is at an advance stage of implementation. Over and above this mode, the Delhi transport department is evaluating the option of other modes, namely the Mono Rail and also the LRT system. This is imperative as the private mode of transport, namely the cars and two-wheelers have still very high modal share of passenger trips, as is evident from the graph below.



Source: Anon 2005, Integrated Multi-modal public transport network for the NCT of Delhi, Final Report, RITES Ltd, New Delhi, p 2-5

According to RITES, public transport in Delhi carries only about 60 per cent of the total vehicular person trips. Desirably this figure should be 80 per cent for the size of Delhi, and hence the need to augment other modes of public transportations.

4.1 Integrated Rail-cum-bus transit

EPCA has held meetings with the Northern Railways on February 4, 2006 and also with the National Capital Region Planning Board (NCRPB) on February 11, 2006 to understand the issues in the implementation of the IRBT. In their submission to EPCA of February 14, 2006 the NCRPB points out that the Ministry of Urban development has submitted a note to the Planning Commission for in-principle approval of the project. The three corridors identified under the project are:

- 1. Shahdara-Ghaziabad (14.93 kms)
- 2. Sahibabad-Shivaji Bridge (17.36 kms)
- 3. Tri Nagar-Gurgaon (30.53 kms)

EPCA is accordingly working closely with the transport department in evaluating all these various other modes of transport and will file a more detailed report with respect to various other modes of transport very soon, as per the directions of November 30, 2005 of the Hon'ble Court.

5. Integration of various modes of transportation

The Hon'ble court has also aksed EPCA to look at the whole issue of integration of transportation systems. In its order dated November 30, 2005 the Hon'ble Court pointed out, "The EPCA shall also examine the issue of integration of the High Capacity Bus Systems with the existing public transport, in consultation with the transport department and submit a report expeditiously." EPCA has already started working on this issue and has held series of meetings with the key agencies.

EPCA is analysing the whole issue of integration of the HCBS and also other modes of transport. EPCA realises that this is the most crucial aspect in any large-scale public transportation project. Integration of various public transport modes is essential to

maximise the ridership on public transport network. Without good integration, public transportation systems could fail to deliver the desired results. EPCA will very soon file a report, as per the directions of this Hon'ble Court, after closely working with the transport department and various other agencies.

6. EPCA's conclusions and recommendations

As is evident from the above assessment, though the Delhi government department of transport has missed the first deadline for the implementation of the first corridor of the High Capacity Bus System, key milestones have been crossed. It is also clear that once the pending issues concerning the first corridor are resolved, the work on this and other corridors can be expedited.

It is important to note that in hese past 3 months key issues that have been holding back the implementation of this public transport system have been resolved: the decision to form an SPV, the decision on the technology to be used for the road engineering in the first corridor and the EFC approval for the first phase of the project.

This project has been under consideration and proposed for implementation for the past 5 years. It is therefore, important to note the considerable progress that has been made in the past 3 months and to hope that this momentum will continue. The pending issues need to be resolved also within a time-bound schedule so that implementation of the project is not impeded further.

EPCA strongly recommends that the Delhi government must begin the process of tendering and simultaneously work to resolve all pending issues. This will ensure that there is no further delay but also ensure that the final tender is only awarded once key concerns have been sorted out. EPCA has been given to understand from the Delhi government department of transport that it would take 68 weeks for the process of tendering to be completed. This time is sufficient, we believe, to resolve all pending issues between the different agencies.

Given the overall current status of the project we recommend:

- 1. The Delhi government should complete the tendering process within 8 weeks so that the first deadline (of February 28, 2006) is postponed to April 30, 2006. During this period, efforts have to be made to resolve pending technical issues between the different agencies
- 2. EPCA will report back to the Hon'ble court before the court closes in May 2006 regarding the progress made to meet this now postponed deadline. It will be the endeavor of all concerned that this new deadline is not shifted any further