

**Subject: Joint Meeting of PMC, PCMC and PMPML with Mr. S.K. Lohia (OSD, Ministry of Urban Development) for discussions on challenges in BRT Design, Implementation and Operations issues in Pune Metropolitan Area**

Date: June 19, 2010

Venue: Council Hall, Pune

Members Present:

1. Mr. S.K. Lohia, OSD, Ministry of Urban Development, GOI
2. Mr. Dilip Band, Chairman and Managing Director (PMPML)
3. Mr. Asheesh Sharma, PCMC Commissioner
4. Mr. Cesar H. Arias, World Bank
5. Mr. Gerhard Menckhoff, World Bank
6. Ms. Nupur Gupta, World Bank
7. Mr. C.M. Kharatmal, R.T.O Pune
8. Mr. D.P. Saste, Head, Safety & Homologation, CIRT, Pune
9. Mr. Ugile, City Engineer, PCMC
10. Mr. Babu Gaikwad, PCMC
11. Mr. Vinay Deshpande, Addl. City Engineer, PMC
12. Mr. Srinivas Bonala, Addl. City Engineer, PMC
13. Mr. Satish Kulkarni, Joint M.D. PMPML
14. Mr. Gawli, Traffic Manager, PMPML
15. Mr. Burse, Chief Engineer, PMPML
16. Ms. Shreya Gadepalli, ITDP
17. Mr. Nitin Warriar, ITDP
18. Mr. Pratik Dave, ITDP
19. Ms. Pranjali Deshpande, ITDP
20. Mr. Jiten Hindocha, IL&FS
21. Mr. Ramakrishna, UMTC
22. Mr. Nikhil Mijar, IL&FS

OSD Urban Transport, Ministry of Urban Development, Government of India, mentioned that about 150 km of BRT has been sanctioned for Pune and Pimpri Chinchwad together out of total of 427 km sanctioned for the whole of India. As far as Pune and Pimpri Chinchwad are concerned, though these are twin cities with separate municipal corporations, from passenger's point of view as well as Government of India point of view, it is considered as one mission city. Accordingly it is important to have an integrated BRT system design, implementation strategy and operations plan for Pune and Pimpri Chinchwad together. However, certain issues relating to the bus design, the height and location of BRT stations, whether on the left hand side or the right hand side on the central median as well as the requirement of minimum right of way for introduction of dedicated BRT system on various



corridor had been under discussion between PMC, PCMC and PMPML for a long time without coming to a common ground. This had seriously impacted the on ground implementation of BRT system. Under the Sustainable Urban Transport Project also, certain BRT system corridors of Pimpri Chinchwad are being implemented as demonstration projects with World Bank loan and GEF grant. As such, there is an urgent need to finalize all the pending issues and find a way forward so as to ensure that the BRTS in Pune and Pimpri Chinchwad is implemented as per the best standards which can set example for others to emulate. In this background he then invited comments and concerns of all the stakeholders and other representatives present in the meeting. After detailed discussions, the following issues were discussed and decided

**DISCUSSION POINTS EXPRESSED AND AGREED:**

**A. GUIDELINES OF BRT:**

1. BRAND IMAGE
2. EXCLUSIVE LANES NETWORK
3. LEVEL BOARDING AND ALIGHTING AT BRT STATIONS
4. ITS
5. ALL IN ALL ONLY A CLOSED BRT SYSTEM IS QUALIFIED TO BE CALLED AS A 'BRT'. ELSE WITH ALL TYPES OF BUSES ON THE DEDICATED LANE, IT CAN AT BEST BE CALLED AS DEDICATED BUS CORRIDOR.

**B. BRT NEEDS TO BE EITHER 'CLOSED' OR 'ABSOLUTELY CLOSED'. OPEN SYSTEMS WHICH ALLOW ALL BUSES TO PLY ON BRT LANES WILL NOT QUALIFY AS A BRT SYSTEM. PROJECTS SANCTIONED FOR PUNE AND PIMPRI CHINCHWAD WERE FOR BRTS AND NOT DEDICATED BUS CORRIDORS.**

**C. DEFINING 'CLOSED' v/s 'ABSOLUTELY CLOSED' SYSTEM:**

1. CLOSED SYSTEM OPERATIONS WILL ENABLE BRT SERVICES TO OPERATE OUTSIDE OF BRT CORRIDORS
2. ABSOLUTE CLOSED SYSTEM WILL HAVE BRT SERVICES OPERATING ONLY WITHIN THE BRT CORRIDOR

**D. PMPML HAS IN PRINCIPLE AGREED FOR REROUTING AND RATIONALIZING THE EXISTING PMPML OPERATIONS IN ORDER TO OPERATE EXCLUSIVE BRT SERVICES AS CLOSED BRT SERVICES WITH BUSES PROCURED THROUGH JNNURM FUNDING. THE FOLLOWING ARE THE GUIDING PRINCIPLES FOR RATIONALIZING AND REROUTING OF PMPML SERVICES FOR BRT.**

1. PMPML ROUTES ON BRT CORRIDORS CAN BE CONVERTED INTO BRT EXCLUSIVE ROUTES

2. FREQUENCIES ON ROUTES OUTSIDE OF BRT CORRIDOR ARE LOW ON SOME OF THE PMPML ROUTES
  3. BRT ROUTES CAN BE EXTENDED BEYOND THE CORRIDOR FOR UPTO 3KMS TO ENABLE DIRECT SERVICE
  4. EXTENSIONS BEYOND 3KM WHERE THE RIDERSHIP BRANCHES OUT FROM THE BRT CORRIDOR WILL FUNCTION AS FEEDER ROUTES. OPERATED BY PMPML REGULAR BUSES
  5. PASSENGER TRANSFER WILL BE FACILIATED FROM BRT EXCLUSIVE CORRIDOR TO FEEDER ROUTES BY MEANS OF INTERCHANGE STATIONS
- E. AVAILABLE RIGHT OF WAY WILL NOT BE A LIMITING FACTOR FOR DESIGING CORRIDORS AND OPERATING EXCLUSIVE BRT SERVICES IN VIEW OF THE FACT THAT THE SANCTION OF THE PROJECT WAS DONE WITH DEDICATED CORRIDORS ALONG THE ENTIRE NETWORK IRRESPECTIVE OF THE RIGHT OF WAY AND ALSO THE PRIORITY AS DEFINED IN THE NATIONAL URBAN TRANSPORT POLICY WHICH PRIORITIZES INVESTMENTS IN PUBLIC TRANSPORT AND NON MOTORIZED TRANSPORT WITH THE AIM OF MOVING PEOPLE AND NOT VEHICLES.
1. PRIORITY NEEDS TO BE GIVEN TO BRT AND PEDESTRIANS FIRST, AND THEN MOTOR VEHICLES
  2. FOR A BRT TO RUN, ONLY 3.5m IS REQUIRED WHICH MEANS ALL SANCTIONED CORRIDORS UNDER JNNURM FOR PUNE AND PIMPRI CHINCHWAD CAN ACCOMMODATE BRT. BRT ON 3.5m CORRIDOR HAS ALREADY BEEN IMPLEMENTED GLOBALLY IN MANY CITIES LIKE QUITO, PERIERA, BOGOTA AND MEXICO CITY.
  3. STREETS HAVING SMALLER RIGHTS OF WAY MAY ACCOMMODATE BRT TWO WAY AND MIXED TRAFFIC ONE WAY OR ONLY BRT TWO WAY OR ONE WAY BRT AND ONE WAY MIXED TRAFFIC. THE SANCTITY OF THE SYSTEM SHALL NOT BE DILUTED
  4. ON STREET PARKING SHOULD BE BANNED ESPECIALLY FROM ROADS WITH RESTRICTED RIGHT OF WAY. WHEREVER IT IS NECESSARY TO PROVIDE ON STRETT PARKING, IT MUST BE CHARGED AS PER THE GUIDELINES FROM THE MINISTRY OF URBAN DEVELOPMENT, GOVERNMENT OF INDIA.
  5. IN CERTAIN EXTREME CASES WHERE IT IS ABSOLUTELY IMPOSSIBLE TO BUILD INFRASTRUCTURE FOR EXCLUSIVE BRT OPERATIONS, BRT MAY RUN ALONG WITH REGULAR MOTOR VEHICLES (MIXED TRAFFIC). THIS HAS TO BE SUBSTATIATED BY STRONG REASONS.
- F. BUS MANUFACTURERS HAVE INDICATED THROUGH AN OFFICIAL COMMUNICATION THAT HAVING THREE DOORS ON THE LEFT SIDE OF THE BUS WILL HAVE ADVERSE EFFECTS ON THE STRUCTURAL INTEGRITY OF THE BUS. CIRT, AS ONE OF THE AGENCIES FOR BUS BODY CERTIFICATION, HAS ENDORSED THIS VIEW. IN CONCLUSION: BUSES SHOULD HAVE TWO



DOORS OF STEPPED BOARDING ON THE LEFT SIDE AND SINGLE LARGE DOOR (2m) ON THE RIGHT SIDE FOR AT LEVEL BOARDING ON THE RIGHT SIDE. SINCE THE RIGHT SIDE DOOR SHALL BE AT 860-900mm HEIGHT, THE MEDIAN STATION SHALL ALSO BE AT 900mm TO MATCH WITH THE BUS FLOOR HEIGHT TO ENSURE LEVEL BOARDING.

G. MINISTRY OF URBAN DEVELOPMENT CAN FUND SURVEYS TOWARDS BRT SERVICE PLAN PREPARATION. A PROPOSAL WITH THE TERMS OF REFERENCE SHOULD BE SENT BY PMPML BY 21<sup>ST</sup> JUNE 2010.

H. AS PART OF THE CAPACITY BUILDING EXERCISE UNDER SUSTAINABLE URBAN TRANSPORT PROJECT, A STUDY TOUR IS BEING ORGANIZED BY MINISTRY OF URBAN DEVELOPMENT WITH ASSISTANCE FROM WORLD BANK WITH GEF GRANT. A DELEGATION OF ABOUT 25 OFFICIALS FROM FIVE SUTP CITIES AND STATES, LIKELY TO BE HEADED BY MINISTER OF STATE FOR URBAN DEVELOPMENT, GOVERNMENT OF INDIA, SHALL VISIT BOGOTA, MEXICO CITY AND LONDON IN SEPTEMBER 2010. REPRESENTATIVES FROM PMC, PCMC AND PMPML ARE ENCOURAGED TO BE PART OF THE DELEGATION.

I. **TIMELINE FOR THE SERVICE PLAN – 16 WEEKS**

1. ANALYSIS OF ETM DATA OF PMPML SERVICES – 2 WEEKS
2. APPOINTING SURVEY AGENCY FOR CARRYING OUT REMAINING TWO SURVEYS: FREQUENCY OCCUPANCY SURVEY, TRANSFER SURVEY – 2 WEEKS
3. TRAINING FOR SURVEYS – 1 WEEK
4. FREQUENCY OCCUPANCY SURVEY: 1 WEEK
5. BUS PASSENGER TRANSFER SURVEY: 2 WEEKS
6. PROCESSING OF DATA: 2 WEEKS
7. IMPORTING DATA INTO MODEL AND CALIBRATION: 2 WEEKS
8. ALTERNATIVES ANALYSIS AND FINAL OPERATIONS PLAN: 4 WEEKS


J. SHARING AND COORDINATION BETWEEN CONSULTANTS AND ADVISORS OF PMC, PCMC AND PMPML. ITDP, AS ADVISOR TO PCMC AND PMPML, WILL COORDINATE WITH ILFS/UMTC (CONSULTANTS TO PMC) TO SHARE INFORMATION AND ARRIVE AT THE FINAL COMBINED SERVICE PLAN FOR PUNE METROPOLITAN AREA COMPRISING OF PMC, PCMC AND OTHER OUTSIDE ADJOINING AREAS WHERE PMPML SERVICES EXIST.

K. **THE OUTPUTS OF THE EXERCISES TAKEN UP WILL RESULT IN**

1. RATIONALIZED SERVICE PLAN FOR PMPML IN PUNE METROPOLITAN REGION.



2. BRT STATION DESIGN, SIZING AND LOCATION ON THE BRT NETWORK.
3. BRT CORRIDOR DESIGN FOR ALL ROADS IN THE NETWORK DEPENDING ON THE RIGHT OF WAY AVAILABLE.
4. MIXED TRAFFIC OPERATIONS PLAN BASED ON DEVELOPMENT OF BRT NETWORK

  
19/6/10

[S.K. Lohia]

O.S.D.

Ministry of Urban Development, GOI