

INDIA: Sustainable Urban Transport Project

Interim Mission – August 23 to 28, 2013

Mission Note

1. An Interim Mission¹ was undertaken to Pimpri-Chinchwad and Hubli-Dharwad from August 23 to 28, 2013, to review the progress on some critical actions agreed during the Mid-Term Review mission held in June 2013. In Pimpri-Chinchwad, the mission met with Dr. Shrikar Pardeshi, Commissioner of PCMC, Mr. Rajni Patil, Joint City Engineer, Dr. Pravin Ashtikar, Joint Managing Director, PMPML and representatives of PCMC and PMPML. Also present were representatives from ITDP and consultants assisting PCMC with the BRT Project. In Hubli-Dharwad the mission met with Ms. V. Manjula, Commissioner, DULT, Mr. C. M. Noormansoor, Managing Director, HDBRTS Company, representatives of DULT and HDBRTS and project consultants. The mission informed that the restructuring process has been completed and as such Hubli-Dharwad is now formally on board in the World Bank-GEF assisted SUTP project.
2. The main objectives of the Interim Mission were:
 - Hubli-Dharwad
 - Review results of Joint Measurement Survey (JMS), discuss final impacts and the adequate incorporation of additional impacts into safeguards documents.
 - Review status of alternatives being analysed following consultations with and requests from affected persons and their documentation and dissemination.
 - Review status of actions agreed for improved communications
 - Pimpri-Chinchwad
 - Assess progress on Bank funded packages, in particular, the performance of the Empire Estate Flyover package contractor
 - Review progress on land acquisition and R&R aspects
 - Assess the progress on key activities under the BRT Implementation Schedule, gaps and issues, in the delivery of BRT system
3. The Mission shared key mission findings with Mr. I. C. Sharma, National Project Manager (SUTP).

A. Current Implementation Progress

Hubli-Dharwad

4. The primary objective of the mission was to review the status of (i) final social and environmental impacts in light of the substantially complete Joint Measurement Survey, ongoing consultations with affected people on proposed alternatives and their documentation into project documents; (ii) analysis and documentation of the key alternatives under consideration; and (iii) agreed actions to improve the project communications. In addition, the mission reviewed the overall progress of the Project.

5. **Joint Measurement Survey (JMS) of affected private properties.** Though this survey has been substantially completed, it is behind schedule. This survey could not be completed in two key locations, i.e. ROB at Navlur, where good number of families are likely to be displaced and around

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Dharga area, where the project could not succeed for realignment to avoid the impacts to Dharga. The final reports on the outcome of JMS are under preparation. It is expected that the extent of land acquisition will increase and there could be higher number of affected families. The number of impacts to non-title holders is expected to go up to 74 from 13 identified in RAP. It is learnt that about 280 petitions were received in response to land acquisition notification related to reduction of width, (163 petitions); compensation enhancements (74 petitions) and other concerns such as Re-JMS (16 petitions), fly overs at certain locations (12 petitions), etc. The project authorities have responded to most of these petitions and some other replies are expected to be sent shortly. The additional, impacts arising due to JMS will be captured in the addendum to RAP to be submitted by October 30.

6. A preliminary meeting with affected land owners of 3 villages (Amargol, Rayapur and Sattlur) was held recently, where the people expressed their views on higher compensation. The other requests that came up during this meeting was in regard to additional Floor Area Ratio (FAR) and relaxations in setback restrictions.

7. There is good progress in negotiations with most of the 15 affected religious structures. The Consultants aiding RAP implementation are engaged in consultations with various affected groups to explain entitlements and elicit concerns and support for the project.

8. **Environment Assessment Update:** The key additional impact based on the substantially complete JMS that has been identified pertains to the private trees that need to be cut for the widening to 8 lane configuration. Currently, the number of trees to be cut has increased by 817. HDBRTS team expects this number to reach 1000, including the remaining portion of road in Navalur, and Lakkamanahalli (for which data processing has been delayed due to health of the enumerator). Tree valuation for these for purposes of compensation to their owners is being done by the Forest Department. In line with the EMP provisions, HDBRTS has also agreed to plant additional saplings as per ratio of 2 saplings for each tree to be felled. The potential for saving/transplanting would also be examined. HDBRTS has agreed to provide the supplementary EA documents by September 30, 2013.

9. In regard to the compensatory plantation target of 8000 saplings in schools and colleges this monsoon, Bank was pleased to note that 5410 saplings had already been planted and the target of 8000 was expected to be substantially completed during the current season.

10. **Alternatives Analysis.** The Mission was apprised of the status of the key alternatives that had emerged through consultations and interactions with Project affected persons.

- Alternatives already evaluated and documented as FAQs: Several commonly asked questions regarding BRT design such as need for BRTS, need for 4 versus 2 lane BRTS, need for going into city limits etc. already evaluated in the DPR had been presented as FAQs in simple easy to understand language.
- The rail option versus the BRTS between Hubli-Dharwad has also been included as part of the FAQs. This will be detailed in the updated project documents.
- The one way option in Dharwad via Hanuman Temple had been evaluated and its results regarding the significant additional impacts to commercial establishments and religious structures compared to the proposed alignment have been communicated to the Dharwad based group of landowners.
- The option of extension of the Rail-Overbridge at Navalur on the Right Hand Side (RHS) in addition to the proposed Left Hand Side (LHS) has been evaluated and been discussed with affected parties. A final decision is expected soon.

- The realignment of the BRT to adjacent vacant land in order to bypass the Dargah has also been evaluated and discussed.
- The proposal for flyovers instead of vehicular underpasses at four locations along the corridor (Navanagar, Bhairidevarkoppa, Unkal Lake and Unkal Cross) has been evaluated and largely finalized.
- The Dharwad Land Owners Association have requested DULT/ HDBRTS for a flyover option for the BRTS within Dharwad city limits to be studied. The Group met with the Bank during their visit and formally handed over a copy of the request to them as well. DULT is in the process of examining the same.
- The option of reduced RoW in between station sections within city limits versus the current proposal for a uniform 35 RoW should also be evaluated.

It was agreed that these alternatives outlining the analysis in terms of the operational/ technical feasibility, costs, social and environmental impacts would be documented in the DPR/ safeguards documents.

11. **Communications & Consultations.** The mission commended the efforts of HDBRTS and DULT for the excellent work done with respect to the HDBRTS website <http://www.hdbrts.co.in/> which was recently launched by HDBRTS. The mission was informed that the translation in the local language is currently underway and will be available on the website soon. The website provides Project information to a wider audience including Project DPR, RAP, EIA/ EMP, Green BRTS Plan, minutes of Consultations, frequently asked questions (FAQ), procedures for Grievance Redress, land acquisition process and progress etc. The Mission reviewed the progress in regard to other agreed actions on improving communication.

- Communications consultant has been appointed by HDBRTS. The consultants are currently working on developing a master presentation about the project which provides the rationale and salient features of the project to the general public. They are in the process of developing brochures and information materials for various interest groups and are working on designing a logo for the Project.
- A Public Information Centre (PIC) has been established within the HDBRTS Company office premises and have begun furnishing information about the project in the centre. However, the PIC needs to be further equipped with information material and dedicated resources.
- Minutes of Consultations have been uploaded on the DULT website and the Mission advised that a dedicated page on consultations be created on the HDBRTS website for the same
- Many of the alternatives being raised by people have now been documented in the form of FAQs and are easily accessible on the HDBRTS website
- The Consultants aiding RAP implementation are engaged in consultations with various affected groups to explain entitlements and elicit concerns and support for the project.
- Project staff (primarily the Managing Director of HDBRTCO and the Chairperson of the company) meet with different stakeholder groups at regular intervals to address their queries and concerns about the project. Consultations with relevant groups on various alternatives are ongoing.

The Mission interacted with the Communications Consultants for the Project who made a presentation on various aspects of their work especially on (i) stakeholder analysis; (ii) Survey questionnaire; (iii) BRTS Logo; and (iii) Master presentation. The Mission, however, noted that there was delay in completing key activities owing to inadequate mobilization of the Communications Consultants even after almost 6 weeks of activity initiation. The Civil Society expert of the Consultants was not available.

- *Stakeholder Analysis.* From a strategic communications perspective, some of the key steps – i.e. a stakeholder perceptions mapping, stakeholders' concerns and communication needs assessment,

stakeholders influence (over the project) mapping – are yet to be undertaken in a rigorous manner. Without this, formulation of an effective communications strategy might be constrained. The information available with the RAP Implementation Consultants from their focus group discussions and the news clippings available with HDBRTS Company are a rich source of information which can be easily tapped, besides direct interactions with the various stakeholders themselves.

- *Master Presentation.* The Mission expressed concern over the poor quality of the presentation being developed and its level of development even after a month and a half of mobilization. The lack of clarity on the key messages to be delivered and for the which audiences also has a major role to play in the quality of the work being done. Given that HDBRTS expects to begin negotiations in earnest with various land owners, and is expecting a meeting with the Corporators and District Ministers, such presentation materials are required urgently. Various collatorals and presentation aids are also required to be in place.
- *Project Information Centre.* The consultants need to provide support to HDBRTS Company in quickly equipping the PIC.
- *Prioritization.* The Consultants appear to be inordinately focused on promotion activities as opposed to risk analysis and mitigation which are the order of the day. The overwhelming focus on developing a logo for the BRTS seems somewhat misplaced given that key tasks such as stakeholder analysis and development of presentation/ communications materials have not been addressed.
- *Media Management.* The Consultants will need to support the SPV through proactive media management. For this it is also important to begin reviewing available media coverage of the project so far.

Finally, while HDBRTSCO intends to engage a full time Public Relations Officer (PRO), in the interim it is recommended that the communications consultants provide a dedicated resource to be based in the PIC to support the company's communication activities.

12. **Access and Parking Study.** A comprehensive study to review access cum parking issues along the main BRT corridor and make recommendations is strongly recommended to avoid opposition to the Project.

13. Detailed site visit notes and mission findings is provided in **Annex 2.**

Pimpri-Chinchwad

14. The primary objective of this interim mission was to review the progress of some specific tasks viz; progress on civil works, progress on LA R&R, status of BRT station contract award, terminal designs and bid documents, service plans for the BRT, ITS procurement etc. In addition the mission also reviewed the status of the actions agreed during the mid-term review mission undertaken in June 2013.

15. **Civil Works on Corridor 3 and 4.** Physical progress of BRT Corridor 3 is about 87% in financial terms, combining the 3 contracts. However, the Road cannot be widened in a total length of about 600 meters (in Contract II) because of non-availability of Land, thus having dis-continuity in the exclusive BRT Corridor. Progress in the Bank-financed Contract I (Interchange at Nashik Phata) is satisfactory and currently at 87%. Although the exclusive BRT Corridor in this contract is expected to be completed by October 2013, the other works (excluding Ramp 2) are expected to be completed by January 2014.

16. *Physical progress of BRT Corridor 4* is about 33% in financial terms, combining the 5 contracts. Land is not available for about 1.75 km of the exclusive BRT Corridor. The exclusive BRT Corridor is not likely to be operational prior to the end of 2014. Progress in the Bank-financed Contract III (Empire State Grade Separator) is highly unsatisfactory. However, the Contractor has shown some improvement in mobilization and progress in recent months. PCMC has granted approval for extension of time till end August 2014, based on the revised construction schedule submitted by the contractor. The mission, however, believes that in view of the pending land acquisition associated with this package, the work is likely to spill beyond the proposed August 2014 deadline. Further details are outlined in Annex 1.

17. **Land Acquisition and Resettlement.** The Mission noted that while overall the land acquisition has been considerably delayed, there had been some progress. In regard to resettlement the Mission strongly advised PCMC to close out pending activities at the earliest:

- *Allotment of EWS Housing.* The EWS housing has now received all clearances and is available for sanction following its inauguration in September 2013. 112 of 176 affected families have submitted necessary paperwork, however, various formalities of biometric cards, down payment, loan sanction etc. still need to be concluded and must be expedited.
- *Allotment of housing to those in Transit Camps.* The housing for squatter families in transit is awaiting MPCB clearance which is expected by September 2013. However, the Mission was concerned to note that affected families were unwilling to pay their initial contribution which was making it difficult to move forward and making the outcome extremely uncertain.
- *Payment of Cash Assistance.* The payment of R&R assistance, initiated in early 2013, has achieved a progress of 50-85 for different types of assistance.
- *Displacement of people without allotment of houses.* Mission has been informed that following Courts dismissal of Review Petition on the alignment in sanctioned Plan, PCMC has undertaken demolition of about 60 houses and a church in Package 2 of Kalewadi Phata-Dehu Alandi Road. People have observed that in anticipation of demolition they have taken most of their belongings and made alternative arrangements. The Bank observed that **this was not in line with the Banks Safeguards procedures and advised PCMC to send a note on the details of demolition and the proposed mitigation measures to deal with the non-compliance.** It was agreed that this would be done at the earliest and no later than September 15, 2013.

18. **BRT Implementation and Launch:** The Mission reviewed the status of the BRT Implementation Schedule for Corridor 1 and 3. In case of Corridor 1:

- Procurement for the BRT Stations has not yet been concluded as the prices of the bid received are much higher than the estimates of PCMC. PCMC is yet to take a final decision on award versus rebid, in case of the later, there are likely to be further delays in the construction of BRT stations and therefore final delivery of BRT. The stations could be ready by July 2014 or November 2014 depending on the decision taken by PCMC.
- Terminal designs for interchanges at Nigdi and Rawet on Corridors 1 and 2 have been finalized but the location and design for the critical Bhonsari Terminal for Corridor 1 is not yet decided. PCMC expects to initiate procurement for the terminals by October 2013, in which case they may become available by November 2014. In case PCMC is able to finalise the location for Bhonsari over the next 6 months, it could become available by March 2015.

- The segregation, merge in merge outs, table top speed breakers and rumble strips could be taken care of over the next 12 months so latest by September 2014. The traffic signals still need to be tended to.
- ITS procurement has been stalled pending approval of proposal under NURM by MoUD. This results in a significant delay in the overall ITS procurement, design, supply and installation of the ITS equipment. Considering the best case scenario of approval by October 2013 and launch of bidding process by November 2013, the installation would not be complete before June 2015.
- The service plan for Corridor 1 and 2 submitted by PMPML is still more of a route rationalization plan than a proper service plan outlining the number of buses between each set of stations per hour, the number of buses at the Terminal interchanges etc. This will require some rework and PMPML agreed to work with ITDP and revert with a proper service plan by October 1, 2013.
- About 640 buses are already delivered and another 660 buses are proposed to be hired and expected to be in place by June 2014.

For Corridor 3:

- The Road infrastructure could be in place by March 2014, provided the 300m embroiled in a court case is resolved.
- BRT Stations could be ready by December-January 2015 provided contractor is on board by January 2014.
- ITS would also follow similar timelines as above and installation requiring about 6 months could be completed by June-July 2015.
- Need for Terminal interchanges is not yet known and maybe clearer based on the ongoing study on the Service Plan for Corridor 3 and 4.
- Study on Corridor 3 and 4 Service Plan is ongoing and likely to be concluded by March 2014 following which it would go through a process of review and finalization within PMPML. Therefore, the Service Plan could be available by September 2014.

Based on the above, it would appear that the maximum delay is likely to be on account of ITS and both Corridor 1 and 3 might end up being launched concurrently around June 2015. The Mission expressed concern at the delays especially in regard to procurements of station, terminals and ITS.

Detailed site visit notes and mission findings are provided in **Annex 1**.

B. Key Agreed Actions

The following actions have been discussed and agreed:

Actions to be Completed	By when	By whom
Progress on agreements reached with Empire Estate Contractor	Continuous	Pimpri-Chinchwad
Submit Monthly Progress Report on Empire Estate Contract	Continuous	
Proposal for connecting Nashik Phata Flyover with Railway station etc.	Sept 30, 2013	
Submit updated BRT Implementation Schedules for Corridors 1-4	Sept. 15, 2013	
Submit Inception Report for BRT Access & Parking Policy Study	Oct. 4, 2013	
Submit draft initialled contract for Promotion & Outreach program consultants	Sept 7, 2013	

Actions to be Completed	By when	By whom
Submission of Baseline Survey Report for Monitoring & Evaluation Consultants	Sept. 25, 2013	
Submit Draft Safety Audit Report	Sept 15, 2013	
Submit Draft ToRs / EoI for TOD Study	Sept. 25, 2013	
ITS - Reinitiate Tendering process	Oct 15, 2013	
Issue Tenders for Nigdi, Rawet, Aundh	Oct 4 /	
Terminals/ Finalise location & Functional Designs for Terminals at Bhosari	Oct 30	
Reinitiate tendering for BRT stations	Oct 4, 2013	
Finalise modalities of hiring BRT Advisor	Sept. 15, 2013	
Submit Final Service Plan copy	Sept. 30, 2013	
Submit Action Plan for 60 Displaced Resident and remaining 120 Residents	Sept 15, 2013	
Submit BER for BRT Depot / Workshop	Sept. 30, 2013	Hubli-Dharwad
Contact award of PMC for ITS	Oct. 15, 2013	
Final Land Acquisition Notification for entire corridor except Navlur & Bhairidevarkoppa.	Sept. 15, 2013	
Issue of ID Cards to affected non-titleholders	Sept. 30, 2013	
Consent Award Notification for 3 villages (Amargol, Rayapura and Sattlur)	Oct. 31, 2013	
Signing of MOUs with Religious Structure Owners	Sept. 30, 2013	
Addendum to RAP reflecting additional impacts	Oct. 31, 2013	
Consent award notification for entire corridor	Dec. 31, 2013	
Payment of R&R assistance	Simultaneously with Award	
	Announcements for respective villages	
Consultation Workshop	Oct 15, 2013	
Submit Draft EIA/EMP Supplementary	Sept 30, 2013	
Complete plantation of 8000 saplings	Sept 30, 2013	
Address Traffic Management issues on corridor	Sept 10, 2013	
Complete Stakeholder Analysis	Sept 10, 2013	
Presentation/ Collaterals	Sept 6, 2013	
Communications Strategy/ Plan	Oct 4, 2013	
Share Parking Study & proposed Policy for HD	Sept 16, 2013	

Annex 1

INDIA: GEF-World Bank-UNDP: Sustainable Urban Transport Program (SUTP)

Pimpri-Chinchwad

1. A World Bank mission visited Pimpri-Chinchwad Municipal Corporation (PCMC) on August 23-24, 2013 to discuss the implementation of the Pimpri-Chinchwad component of SUTP. It met with the Commissioner of PCMC, Dr. Shrikar Pardeshi, Joint City Engineer, Mr. Rajan Patil, and some of their staff and consultants; also present were staff of PMPML and ITDP which is assisting PCMC with the BRT Project. A meeting was also held on August 24 with Dr. Pravin Ashtikar, Joint Managing Director, PMPML, some of his staff, and representatives of PCMC and ITDP to review current proposals for the bus service plan for Corridors 1 and 2.

Proposed BRT Program in Pimpri-Chinchwad:

2. The following four BRT corridors are being established at this stage:

- (i) Old NH-4 (Mumbai-Pune road),
- (ii) Aundh-Rawet road,
- (ii) Nashik Phata to Wakad road,
- (iv) Kalewadi to Dehu-Alandi road,

3. The first two corridors have been initially sanctioned by JnNURM. All expenditures for the old NH-4 are complete, and most construction of the Aundh-Rawet Road is completed as well.

World Bank supported Project

4. **Corridor 3:** This exclusive BRT Corridor of about 8 km length is being constructed in 3 works contracts, out of which only Contract I (costing about 53.5% of the whole corridor) is being financed by the Bank. The Table in Appendix to this Annex presents the overall status of the 3 contracts in this corridor. Overall progress in this corridor is about 87% in financial terms. The exclusive BRT Corridor cannot be fully operational because of non-availability of land in a few stretches.

5. *Contract I: Interchange at Nashik Phata :* Progress of this contract is satisfactory. PCMC has not been able to hand over to the Contractor as yet encumbrance-free land for construction of Ramp 2, Loop, and part of Ramp 1. PCMC informed that the land for Loop and Ramp 1 would be available in one and half months. The Contractor committed that, assuming that the remaining land for Ramp 1 will be available in one and half months, it would complete the remaining Ramp 1 works within the current contract completion date of 31 October 2013. The Contractor also informed that it would take four months to complete the works for Loop after getting the land, thus completing the contract (except Ramp 2) not earlier than end-January 2014. PCMC also informed that the land for Ramp 2 is not likely to be available shortly.

6. The pedestrian facilities for crossing of BRT Corridor 1 along Mumbai-Pune National Highway 4 (NH4) as well as for travel between ground level on NH4 and Corridor 3 at higher level are not included in this contract. Unless these are constructed, both Corridor 1 and Corridor 3 BRT cannot be satisfactorily utilized by the public. The Contractor for Interchange at Nashik Phata informed that it has submitted to PCMC its offer for constructing these facilities. However, PCMC informed that it is contemplating to award these works through open invitation of bids. PCMC needs to decide on this early and take action(s) accordingly.

7. The Mission observed that the Separators constructed between the exclusive BRT corridor and the carriageway for other traffic, along about 900 m length of this contract, is not efficient. In case of a Bus getting stalled in the BRT corridor, other Buses behind the stalled one would also be blocked. The Mission suggested to PCMC to consider constructing such Separators of low height kerbs mountable by the Buses running through the confined BRT corridor and non-mountable by the traffic from outside of the exclusive BRT Corridor.

8. *Contract II:* Land is not available for lengths of 80 m and 500 m. Remaining works are expected to be completed by Oct 2013. PCMC needs to appoint Contractor for construction of Bus Stops.

9. *Contract III:* All works have been completed for the 2.28 km long exclusive BRT Corridor, except for one side of 260 m length for which land is not available as yet.

10. **Corridor 4:** This exclusive BRT Corridor of about 8 km length is being constructed in 5 works contracts, out of which only Contract III (costing about 45% of the whole corridor) is being financed by the Bank. The Table hereinafter presents the overall status of the 5 contracts in this corridor. Overall physical progress in this corridor is about 33% in financial terms. The exclusive BRT Corridor cannot be fully operational because of non-availability of land in a few stretches.

11. *Contract I:* This contract is fully complete except accessories like street lighting and except a length of 60 m because of non-availability of land.

12. *Contract II:* Land is not available for this contract, and therefore no work has been carried out.

13. *Contract III: Empire Estate Grade Separator:* Progress of this contract is highly unsatisfactory. Only 20% progress has been made in 95% of the original contract period elapsed. This contract works are divided in seven parts. PCMC has not been able to hand over to the Contractor encumbrance-free land in Part 1 (about 200 m at the beginning) as well as in Part 7 (Loop). However, considering the work sites available with the Contractor, its progress has been very slow. It is understood that there was substantial delays in surveys and investigation as well as in finalizing the detailed designs. The Contractor's mobilization as well as procurement of materials was poor. The Contractor was unable to put necessary fund for satisfactory progress of works.

14. An extension of Time (EoT) has been granted until 31 August 2014, for completion of the contract works. The Mission is informed that the EoT was accorded based on (i) Delay in Handing the Land to the Contractor, and (ii) Delay in Approval of General Arrangement Drawing (GAD) by the Railways as well as by PCMC. The Mission is informed that the Contractor's mobilization has improved and its procurement of materials is satisfactory in recent times. The Contractor is commissioning the 2nd Gantry (for erection of Superstructure Segments), to be operational by end-August 2013. In addition, the Contractor assured to mobilize a Hydraulic Crane by February 2014, to erect the Segments wherever Gantry cannot operate. The Contractor has mobilized one Deputy Manager on 23 August 2013, and planning to mobilize 2 more Engineers by end-September 2014.

15. The progress has fallen behind with respect to the construction schedule submitted by the Contractor on 21 March 2013 with completion of contract works by 31 August 2014. The Contractor is expecting to complete erection of all Superstructure Segments in another 10-12 months with the resources planned. Therefore, the Mission assesses that the contract works can be completed in all respects by end of 2014 at the earliest. However, that will require continuous strengthening of mobilization (including labour force and equipment) as required and continuous satisfactory progress with increase in supply of materials as per the need by the Contractor, and also timely approval of designs, drawings and erection schemes etc by the Railways. The Mission noted the urgency of construction of the Service Roads in Part 4 by the Contract IV Contractor, to facilitate erection of Superstructure Segments by the Contract III Contractor. The Contractor informed that it will require at least 150 days to complete the Part 1 and 160 days to complete the Part 7 (Loop) after the respective land is available.

16. The Mission understood that the Railways is not clearing the designs and drawings because of non-payment to it. A dispute is ongoing between PCMC and the Contractor on this matter since November 2012. The Mission is however informed that the Contractor has agreed to make the payment to the Railways with 'objection', in order to facilitate approvals by the Railways allowing the Contractor to take up works in the railway land.

17. The High Tension (HT) Cables of the Railways are causing hindrances in small lengths in Part 2 and in Parts 4 and 7. Although PCMC had paid the cost of relaying the HT Cables to the Railways in March 2012, the Railways have started the works in May 2013 and likely to be completed by November 2013.

18. The June 2012 Mission had commented on inadequate width (5.5 meters) of the carriageways in Part 4, the Indian standard width being 7.5 meters. The Mission noted that the width of these carriageways has since been increased to 6 meters by little decrease in widths of footpaths and parapets, and no further increase could be made due to restricted width between the high-rise Empire Estate buildings on both sides.

19. *Contract IV:* Works are continuing in full swing. Land is available except for 60 m of MIDC land.

20. *Contract V:* 1.45 km of exclusive BRT corridor (out of the total contract length of 3.79 km) is fully complete. Land is not available for lengths of 50 m and 300 m in the remaining length.

21. **BRT Stations:** The Mission expressed concern over the delay in finalizing award. Bus station design was approved on October 19, 2012, and Project Management Consultant was appointed for Bus Station Works on November 1, 2012. Tenders were invited on January 26, 2013 for BRT stations on all four corridors. One bid was received in May 2013 for each corridor (from the same bidder), with a proposed price substantially above the estimate. The mission noted that bid prices for BRT stations in Indore and Naya Raipur had also come in high, partly because of the special materials and nature of this type of work. The mission recommends that PCMC take an early decision keeping in mind the experience with BRT contracts in other cities building BRT systems and also the tight timelines for the stations to be completed in 2014. It was agreed that in case PCMC decided to go for rebidding this would be initiated no later than Oct 4, 2013.

22. **BRT Terminals:** PCMC informed the Mission that the proposal for higher FSI and commercial development in the Terminal locations had been forwarded to the state government for approval. Meanwhile, they proposed to move forward with the development of the Nigdi and Ravet terminals for which Standing Committee approval was expected in the September 20, 2013, meeting. The Mission advised PCMC to not overlook the other crucial terminal on Corridor 1, Bhonsari terminal, as well as the Aundh Terminal on Corridor 2. PCMC presented the latest drawings for the terminals and interchanges for Corridor 1 (Nigdi, Bhosari) and Corridor 2 (Ravet and Aundh). The former two are the most urgent and should be completed when the BRT starts operations.

- (i) For **Nigdi**, tenders could be issued once approval is obtained; the mission recommends that the tender documents be completed based on the current design. PCMC also shared that owing to Defense related constraints on the site they would proceed with temporary construction on the site.
- (ii) The current design for **Bhosari**, consisting of a turnaround BRT platform underneath an existing road flyover, would not suffice over the long term, as passenger demand increases. The next subheading discusses possible solutions that could be considered.
- (iii) Tenders should be issued for **Ravet** based on the existing design.
- (iv) The layout of the facility at **Aundh** – a bus depot with a small demand of passenger transfers – is closely linked to road flyovers which PCMC has sanctioned to deal with traffic congestion. ITDP offered to review the layout to optimize conditions for NMT and

bus passengers. It was also suggested to consider Aundh as a Depot facility only given that passenger movement was expected to be insignificant and there was a severe need to bus parking and depot facilities for PMPML.

23. **BRT Spur to and Terminal at Bhosari:** A large number of passengers to the high-demand Bhosari zone will use BRT routes that peel off from Corridor 1 at Nashik Phata. Because of the issues concerning the Bhosari terminal (see item (ii) above), the mission – accompanied by PCMC staff – carried out a field visit of that zone and has the following observations:

- (i) Bhosari is a very active commercial area with many conflicting traffic movements, eased somewhat by a long 4-lane flyover which bypasses much of the through traffic.
- (ii) It is served by many public transport services (most of which seem to terminate there), consisting of PMPML, regional buses, private buses of varying sizes, and informal paratransit.
- (iii) It makes a lot of sense that many Corridor 1 BRT buses should terminate at Bhosari, but the transport solution ought to transcend the mere construction of a BRT trunk-feeder terminal, but take account of the needs of all public transport, mixed-traffic flows, parking and the many pedestrians mingling in the area.
- (iv) Fortunately, a large Government-owned area exists at Natyagruha about 400 m north of the main Bhosari intersection. It appears that a public transport terminal, including a BRT turnaround, could be placed there as part of a comprehensive transport solution for that area.
- (v) It might be complemented by a “normal” BRT station near the Bhosari intersection to serve the high passenger demand of the surrounding commercial area.
- (vi) Another option to place a BRT trunk-feeder od plan for the entire area. Since a long-term solution would take several years to design and implement, (b) an interim layout of the BRT terminal should be defined quickly so it can be implemented no later than March 2015. It should be compatible with the long term solution established under (a). As a first step – hopefully no later than mid-September 2013 – conceptual layouts at both possible terminal locations (petrol pump and Natyagruha) should be prepared for consideration by PCMC management.
- (vii) It should also be determined if and where the BRT services between Nashik Phata and Bhosari would have stations, and whether these should be in the median or along the curb. The mission recommends that PCMC define the location of stations (or bus stops) between Nashik Phata and Bhosari and examine the possibility of a busway underneath the flyover.

24. **ITMS for BRT in Pune and Pimpri-Chinchwad:** UMTC/ILFS was appointed as Project Management Consultant for ITS work in September 2012. The PMC prepared a Detailed Project Report, Technical specification & Request for proposal. Tenders for the ITS consultant were invited in March 2013. Tender submission date was June 15, however, no tenders were received. This was mainly triggered by PMPMLs inability to respond and issue clarifications to pre-bid queries especially in regard to implementation timelines and the phasing of the over-ambitious ITMS implementation to all Pune and Pimpri-Chinchwad buses, and the uncertainty whether Pune Municipal Corporation will be able to finance its part of the contract.

25. According to PMPML, the ITMS will now be confined to the BRT only, costing roughly Rs. 55 crores, and well within practical limits. A proposal for grant funding under the NURM- Second Bus Funding Scheme of MoUD has been submitted and PMC is of the view that the revised bid process will only be initiated upon approval from MoUD. The Mission expressed serious concern over the continuing delays in finalizing the ITMS tender and its implementation. The Project has lost about six months time with this aborted tender process and further delays will only delay the full implementation of the BRT further. Of greater concern is the proposed course of action if the proposal for grant funding is not

approved by MoUD. Rather than continue waiting until Pune's participation is confirmed and risk launching a sub optimal BRT system, it was suggested that the contract could be reformulated to exclude the AFC, PIS and other components originally planned for the Pune section, and focus on the ITS implementation for the BRT in the Pimpri-Chinchwad area only. While this might involve a slightly higher cost for PCMC owing to common control centre costs and on board costs, it would ensure a quality BRT system for Pimpri-Chinchwad. It would also result in demonstration effect so that PMC may also eventually opt for the ITS implementation. PCMC expressed its willingness to initially finance the costs of the control center, even though it ultimately would also benefit the Pune area, and that they could recover the PMC share as and when they were ready to implement ITMS.

26. **Traffic Safety Audit:** PCMC presented the contents of the interim report prepared by its traffic safety consultant, from IIT Delhi. Interesting options have been developed on how to control traffic at underpasses and other intersections and on traffic safety measures at pedestrian crosswalks. The situation at the on- and off-ramps (between the express lanes and service road, crossing the future busway) was also analyzed; as a conclusion, it is planned to close 4 of the 20 ramps. At this stage, few specific recommendations have yet been made, awaiting the evaluation of the options. The mission recommends that three aspects should also be considered in the traffic safety audit:

- (i) At some stage, perhaps even from the beginning, express BRT buses will operate along the Corridor 1 (NH 4). The traffic safety specialist has analyzed and made preliminary recommendations to ensure safe traffic flow at the on- and off-ramps – but without taking account of express BRT buses that would (eventually) use those ramps. Such an analysis should be added.
- (ii) Particularly at mid-block locations, pedestrian access to the BRT station is of great concern, and the safety specialist has developed some interesting options, including specially lit crosswalks. However, the presentation did not include such options as raised “tabletop” crosswalks, nor speed bumps placed ahead of crosswalks – as have been proposed for the new BRT in Hubli-Dharwad. These should be seriously considered, perhaps combined with the special lighting options already defined.
- (iii) It would be good to see an analysis on how to minimize the hazard of motorized two-wheelers hitting pedestrians, especially at intersections where left- and right turning cyclists often conflict with pedestrians. Enforcement of traffic rules and better driving behavior are important, but some physical measures could also be useful.

27. **Additional Works Required on Corridor 1:** The traffic safety audit is addressing some aspects of the physical segregation of the BRT busway from the mixed-traffic lanes. The optimal design solution (full segregation) may be complicated by such issues as (a) the expected high number of peak hour buses and the need to avoid bunching and congestion on a segregated busway, (b) the incorporation of BRT express services in the corridor, (c) the allowance required for mixed-traffic slip ramps between the high-speed NH-4 highway and the service roads on either side, and (d) the best way to handle the conflict between the BRT bus movements and the high right-turning and U-turning volumes at some roundabouts and other major intersections along the corridor. An option of the safety audit is to install traffic signal controls at the roundabouts, other cross streets, and midblock BRT stations. Once the recommendations of the traffic safety audit have been received and approved by PCMC, bids will have to be issued for geometric changes and traffic signals that provide safe traffic and pedestrian conditions while at the same time minimizing delays for BRT buses. As the tender for physical segregation has already been awarded, modifications may be necessary in his contract to incorporate the results of the traffic safety audit.

28. **BRT Service Plan for Corridors 1 & 2:** In early August, PMPML submitted a first version of the service plan for the BRT corridors 1 and 2, based to a large degree on the analyses carried out by ITDP some time ago. Several issues were raised during the discussion, including the need to know more clearly the expected bus volume on each section of the BRT. It was agreed that PMPML would modify

its presentation, in collaboration with ITDP and including graphical presentations of each BRT Route, and submit its report by September 30, 2013.

29. **BRT Service Plans for Corridors 3 & 4:** Previous drafts of the BRT service plan did not include any bus services for Corridors 3 and 4. As these are new road connections, there are no existing bus routes that could be restructured, and thus transport demand data (including origins and destination) are needed. PCMC contracted a firm, from its own resources, to conduct surveys and prepare service plans for the two corridors. The Inception Report was commented on by the Bank on April 26 and during the June 2013 mission. As a result, the consultants made several changes in their proposed approach, including a finer zoning of the study area (Pimpri-Chinchwad is now subdivided into about 150 traffic zones, rather than only 105 beforehand). The land use categories used by the consultants seemed incomplete and they were advised to use the normal categories used in planning. ITDP offered to share the existing OD patterns of bus passengers and also advised the consultants to review the existing model developed by CRISIL for preparing the CMP for Pimpri-Chinchwad.

30. The surveys are delayed by 2-3 months but should be completed by September. The mission suggests that the survey data be shared with the Monitoring and Evaluation Study that is being carried out by IBI. Moreover, as the principal results of the service plan study are to give guidance on future BRT-cum-feeder-bus-routes, the mission suggests that PMPML should be involved in following its progress. The mission noted again that BRT routes on these corridors would likely turn off onto Corridors 1 and 2, and that it expects that the study would give guidance on the optimal route combinations as a basis for defining the overall BRT route system in Pimpri-Chinchwad.

31. **Studies, other technical assistance (TA) and capacity building:** The mission discussed the status of the various studies under implementation, procurement and ToR preparation under the GEF grant.

- (a) *Parking Policy and Master Plan and Passenger Access to BRT:* The draft initialled contract has been cleared by the WB and PCMC is awaiting their Standing Committee approval before entering into the contract and initiating the study. The Mission was advised that the approval was expected in the Standing Committee Meeting scheduled in end August, and it was agreed that contract signing would be completed by early September and Inception Report made available by October 10.
- (b) *Promotion & Outreach Plan for BRT:* CER has been received and draft initialed contract shall be submitted for approval by September 7, 2013.
- (c) *Monitoring and Evaluation:* The M&E consultant briefed the Mission on the progress update. The baseline survey which was to be initiated in June are delayed and expected to be completed by end August 2013 following which the consultants expect to submit their report consisting of M&E indicators by 25 September.
- (d) *ToD Policy:* It was discussed that Detailed Development Plans be developed as pilots as part of the Policy. PCMC shall prepare and submit a draft ToR by 15 September 2013.

32. **BRT Advisor:** Previous missions have recommended that PCMC hire an experienced BRT Advisor who can help ensure that all the key elements of infrastructure and service are in place for launch of the BRT. PCMC has been pursuing this matter with CEPT, Ahmedabad. The Mission was informed that CEPT agreed to provide advisory services to PCMC (and PMPML and PMC) on the aspects that need to be considered for launching a modern BRT. A BRT workshop was scheduled for August 23/24, 2013 to discuss urgent aspects of BRT implementation. Unfortunately that workshop had to be called off and is now expected to take place in September 2013. The mission considers this collaboration to be very important and requests to be advised, when the new date of the workshop is known.

Project Management

33. **Special Purpose Unit for BRT:** The operation of a BRT implies a continuous control of bus schedules and a generally closer supervision of service quality than is common with conventional bus services. It was confirmed during the September 2012 mission that a BRT Cell (or Special Purpose Unit) should be established within PMPML to perform these tasks. The current mission was pleased to learn that the establishment of a BRT cell has recently been approved and it will start functioning in September. PMPML and PCMC have identified the staff to be assigned initially to the cell, the functions of which will follow the structure similar to that of Janmarg in Ahmedabad. The mission advised that any training of the new staff could be funded from the GEF if requested by PCMC; similarly, any short-term specialists to assist on particular tasks could be funded from the same source.

Social Safeguard

34. The following is the summary of implementation of key land acquisition and resettlement actions.

35. **Allotment of EWS housing:** The mission was informed that PCMC has now received both “occupation certificate” from Pimpri Chinchwad New Town Development Authority (PCNTDA) and “consent to operate permission” from State Pollution Control Board and the houses are ready for allotment. Out of the 176 affected families, 112 families have submitted documents in support of their eligibility and their applications will be processed. However, there are still some work such as issue of biometric cards, payment of initial down payment, approval of loan for balance payment, etc. that are need to be completed prior to allotment of houses. PCMC has indicated that the allotment to first batch of eligible PAPs is expected in mid-September, 2013.

36. **Allotment of houses to those living in Transit housing:** The shifting of affected squatter families who are staying in transit housing since January 2011, is considerably delayed from the originally envisaged date of October, 2012 proposed in the RAP. Though, these houses are ready for occupation, the statutory clearance of “Consent to Operate” from State Pollution controls Board” is still pending. In addition, PCMC also mentioned that the PAPs are reluctant to pay their initial contribution, without which PCMC is unable to move forward in their resettlement process. Based on this, the resettlement of these squatter families is now becoming increasingly uncertain. This will be discussed in more detail during the next supervision mission to find some satisfactory resolution to complete the process of resettlement of these affected families.

37. **Payment of Cash assistance:** The payment of R&R assistance to various impact category PAPs was commenced in April 2013 and so far a large number of PAPs have received the assistance. The progress varies between 50 to 85 % for different type of assistance received. The payment of balance payments are held up mostly due to non-availability of PAPs, not interested due to small amounts, want to wait for the outcome of court appeals, before R&R assistance is accepted. The mission discussed and understood that PCMC will notify the list of PAPs who have not yet received the payment in their web site and also contact the PAPs directly to complete the payment of balance amounts. It was also discussed that a newspaper advertisement will be given listing all those who have not taken the R&R assistance amounts by then in late November 2013 inviting them to come forward to collect their payments before December 31, 2013, and then close the payment of R&R assistance thereafter.

38. **Land Acquisition:** The overall land acquisition continues to progress slowly. However, it was noted that there is some advancement in case of land acquisition to Nashik Phata flyover and ramp, where one of the award is expected very shortly and the other awards will also follow soon. The mission was informed that in case of MIDC land the valuation of affected properties is now completed and PCMC will soon hold negotiations with the affected unit owners to complete the process of taking over of land of the

project. The detailed progress in land acquisition will be reviewed in more detail during the next supervision mission.

39. **Displacement of people without allotment of housing:** The PCMC has informed the Bank Team that the court has vacated the Requesters review petition on the alignment and DP sanctioned Plan along Corridor 4. The Bank Team was informed that PCMC has undertaken a demolition of about 60 houses and a church in package 2 of Kalewadi Phata and Alandi Road. The Bank team visited the site and interacted with few people at the site. The people informed that they were staying at this place for 20-30 years and were paying the property tax and other municipal taxes. They are now forced to move to either to rented houses or adjust with other relatives. The people also mentioned that in anticipation of demolition, the people have taken most of their belongings and made alternative arrangements. The Bank Team observed that this action is not consistent with the Bank safeguard procedures for resettlement of displaced families and advised PCMC to send a note on the detail of the demolition and the proposed measures to deal with this situation. In this stretch there are about 180 families who need to be moved and out of these about 60 families and a church as of now. PCMC has indicated to the Bank team that the remaining families are being offered the alternative EWS houses and those houses will be removed only after they were allotted alternative houses. **PCMC will send a note to the Bank at the earliest on how to deal with this situation and also remaining 120 families adjacent to this site who also need to be moved to make the land available to the contractor.** The mission also met those other families and learnt that they are looking forward to get EWS allotment very soon to avoid the situation of demolitions. The Bank team informed that PCMC intend to allot the houses to these people at the earliest and then only take the land for handing over to the contractor. In case of those already displaced were not allotted alternative EWS houses by end of September 2013 the Bank Team may require to discuss with PCMC on the remedial measure until such time an alternative arrangements are made to those already displaced families.

Details of Civil Works Progress – Pimpri-Chinchwad

Contract	Description	Length (km) of exclusive BRT corridor	Original Contract Amount (million INR)	Revised Contract Amount (million INR)	Start Date	Original Completion Date	Extended Completion Date	Approx. Value of Works Done (million INR)	Physical Progress	Remarks
Corridor 3										
3-1	Interchange at Nashik Phata	0.9075	988.1		12 July'10	13 Jan'13	31 Oct'13, except for Ramp 2 and Loop	880	89% (effectively, 96% of INR 916 million, excluding pedestrian subways and Ramp 2 but including Loop)	
3-2	Nashik Phata to Kasptewasti	4.85	571.1		25 Aug'09	24 Feb'11	31 Oct'13	370.9	65%	Land for total length of about 580 m not available
3-3	Kasptewasti to Wakad	2.28	288.7	400.1 (0.9 km length added, which is not an exclusive BRT corridor)	25 Aug'09	24 Feb'11	31 Aug'13	352.6	88% (100% of 2.28 km exclusive BRT corridor, except for one side of 260 m length for which land is not available)	One side land not available for 260 m length of exclusive BRT corridor
Corridor 4										
4-1	Kalewadi Phata to Chinchwadg aon Bridge Phata	1.600	241		25 Aug'09	24 Feb'11	30 Sep'13	215.6	89.5%	Land not available for 60 m length
4-2	Chinchwadg aon Bridge Phata to	1.400	198.9		14 Dec'10	13 Jun'12	31 Mar'14	0.0	0%	Land not available for the full

Contract	Description	Length (km) of exclusive BRT corridor	Original Contract Amount (million INR)	Revised Contract Amount (million INR)	Start Date	Original Completion Date	Extended Completion Date	Approx. Value of Works Done (million INR)	Physical Progress	Remarks
	Pawana River Bridge Approach									length
4-3	Empire State Grade Separator	1.600	994.2	1001.35	6 Apr'11	10 Oct'13	31 Aug'14	197.85	20%	Land not available for about 200 m of exclusive BRT Corridor
4-4	Pawana River to KSB Chowk	2.080	372.9		28 Feb'13	31 May'14		24.1	6.5%	Land not available for 60 m length
4-5	KSB Chowk to Dehu Alandi Road	1.450 (total length of contract 3.795 km)	370.7		25 Aug'09	24 Feb'11	31 Dec'13	281.5	76%	Exclusive BRT corridor length 1.45 km fully completed

Annex 2

INDIA: GEF-World Bank-UNDP: Sustainable Urban Transport Program (SUTP)

Hubli-Dharwad

1. A World Bank mission visited Hubli-Dharwad on August 26-28, 2013 to discuss the preparation of the Hubli-Dharwad BRT project. The meetings were attended by Ms. V. Manjula, Commissioner, DULT, her staff and consultants; Mr. C. M. Noormansoor, Managing Director, HDBRTS Company, and his team; and representatives from the PMC. The restructuring of SUTP has now been completed, and Hubli-Dharwad is formally included in the World Bank-assisted operation.

2. **BRT Project:** for the HDBRTS Project involves improving bus services in the Hubli and Dharwad twin cities including the implementation of a 22.3 km BRT line, consisting of the 11.8 km long corridor between the two cities, and extensions into their central districts. BRT operations are expected to commence in 2015. Proposed project components include:

- Segregated central bus lanes with median bus stops.
- Trunk and Feeder services; Off-board ticket collection system, with integrated ticketing with trunk and feeder services.
- Level boarding & alighting.
- ITS for BRTS and ATCS for traffic management along the corridor.
- Bus fleet will include 12m, 900 mm standard buses and articulated buses.
- Comprehensive development of the city transport infrastructure including depots, workshops, terminals both for BRT and feeder buses; ITS for BRT and traffic management; and last-mile connectivity.
- Interchange facilities between sub-urban and city service.

Technical Discussions

3. **Elevated Busway Options in Dharwad:** In response to a request from concerned residents of Dharwad, an option is being considered to replace the northernmost section of the at-grade BRT in Dharwad by an elevated busway, about 2 km in length. There was general agreement that such a long viaduct would be costly and functionally undesirable as at two stations BRT passengers would have to reach the platforms about 5 meters above street level. One attractive feature of this option, however, would be the grade separation of the BRT across the complicated junction at Jubilee Circle. A sub-option was suggested, under which the busway would be elevated just across Jubilee Circle (in the mission's view, this would substantially reduce BRT delays at this location), while southward from Dharwad Court it would be at-grade as originally designed. CEPT is expected to complete the evaluation shortly.

4. **BRT Stations:** Besides the buses, stations are the most visible symbol of a BRT system and can contribute greatly to the image of the new system (or detract from it). The Hubli-Dharwad station design shown to the mission is unusual, consisting of a suspended roof over medium high (about 1.45 m) metal walls and moving doors. In the view of this and the previous mission, the architectural concept is highly attractive and avoids the box-like appearance of the stations commonly seen in other BRT systems. During the current mission, it was tentatively agreed to omit the symbolic tower from the station design, as it might hinder future extensions of the station. It was also agreed that the standard station provide bays for two articulated buses on each side for only select high volume stations, and continue with the earlier concept of one articulated and one standard-sized bus in the remaining stations.

5. Most BRT stations are planned to have ramp-FOB access on one side, and at-grade crosswalks on the other. The station construction would be funded in part from the World Bank loan. It is expected

that tenders for building the first batch of stations (about 50% of the total) will be issued by October 2013.

6. **Foot Over-Bridges (FOBs):** In addition to the accesses to BRT stations, pedestrian overpasses are proposed at 9 mid-block locations. While recognizing the desire of key decision-makers to build FOBs, the mission notes that in general such overpasses are often not used by pedestrians. The Mission recommends that stations with high traffic volumes should be provided at grade access to ensure easy accessibility to passengers. Accordingly, it has been agreed to provide for at grade access in addition to FoBs on stations with an estimated traffic volume in excess of 10,000. The standard design of FOBs envisages ramps that are suitable for the movement of persons with disabilities. This is very good. In addition, the mission suggests to also consider building stairs at each side which – as they are shorter – may be preferred by many pedestrians.

7. **BRT Flyovers:** Earlier this year, the original concept of Vehicle Underpasses – i.e. the full eight lanes of the facility were over-passing cross streets at selected locations – has been changed to at-grade crossings of mixed traffic lanes at the cross streets, combined with BRT flyovers over the cross street. Previous missions had already supported that design change. Two of these flyovers will have two lanes, and one (the longest) will have three lanes. The mission understands that these are final decisions: however, if for any reason those decisions are revisited, the mission suggests that the long flyover be reduced from 3 to 2 lanes, both for safety and cost reasons.

8. **BRT Depot/workshop and Transfer Facilities:** Bids have been received for the construction of BRT Depots at Hubli and Dharwad and for a divisional workshop at Hubli. It was agreed that the bid evaluation report shall be submitted by Sept 30, 2013. Moreover, tender documents are almost ready for Hosur Terminal and a local-bus terminal in Dharwad; the mission concurs with the design plans that it had recently reviewed. Designs and bidding documents for other infrastructure are under preparation.

9. **Last-Mile Connectivity:** Outline plans for pedestrian-friendly infrastructure were shown for Navanagar and Dharwad. The concept was to develop networks of convenient sidewalks and walkways, not all of which were feeding BRT stations. After some discussion, it was agreed that the component should focus on walking facilities (perhaps 500 to 1000 meters long) that provide direct access to BRT stations – primarily in the built-up areas of Hubli, Navanagar and Dharwad. The network could be extended in a phased manner.

10. **Mixed Traffic Flow:** While the objective of this project is to improve public transport (and NMT) conditions, it is important that the new facilities do not become the cause of severe mixed-traffic congestion, an effect which could create serious opposition from much of the travelling public – as had been the case in New Delhi some years ago. Such congestion is unlikely to be caused in the stretch between the two cities (where many new lanes are being added), but it could occur in the existing street system of the built-up areas, where the new BRT may require additional signal phases at some intersections. CEPT has carried out some traffic simulations of individual road stretches, which resulted in higher traffic speeds for all modes, including private vehicles; however the mission was informed that similar analyses had not yet been carried out for the intersections – the neuralgic points and potential bottlenecks of any urban street system. The mission therefore recommends that signal phasings be defined and capacity analyses carried out for the key intersections in Hubli and Dharwad.

11. **Parking of Cars and Two-Wheelers:** Apart from the BRT busway, the corridor design allows for two mixed-traffic lanes in each direction. It assumes that these two lanes are free for moving traffic, i.e. that the curb lane would not be obstructed by standing vehicles. In the built-up areas, it is common that cars and particularly two-wheelers park on the side of the roadway and on the (often unpaved) area between the carriageway and the building line. As there is rarely off-street parking available nearby,

many drivers and shop owners rely on their “right” to have space available for parking. With the opening of the BRT, that space will be no longer available; if the current parking behavior persists, traffic may become congested and the new sidewalks blocked by vehicles. The mission expressed its concern about this issue which could jeopardize the functioning of the corridor and taint its image – resulting in opposition to the BRT concept itself. It was noted that it is the municipality that is responsible for parking and the police for its enforcement. The mission was promised that (a) the draft of the new parking policy would be sent to the Bank for its information, as well as (b) a parking inventory and study for Hubli-Dharwad, that has been carried out in recent years. While the mission would like to have the opportunity to discuss parking with these institutions, particularly in view of a new parking policy that the State will send shortly to the municipality for its consideration, this important issue cannot be ignored and would form an integral part of the strategy for sustainability of the BRT Project.

12. **Access issues for Properties along the BRT Corridor.** The Mission visited the corridor sections within city limits and observed the issues with access to properties owing to the proposed land acquisition. The RoW proposed here is 35m. The current design would, in several instances, barely scrape the buildings themselves, but would require the removal of the staircases and make it impossible to get access to existing parking garages. While the 35m constant width may have been a useful planning assumption, it does not need to be mechanically followed throughout, especially in sections in between stations where there are opportunities for reduction. In view of the heavily built up areas in the city sections and concerns around land acquisition and access **it is strongly recommended that the opportunities for reducing land take in the mid-block sections be evaluated.**

13. The pictures below, which are from between Hosur circle and the planned Hosur terminal, illustrate the complications we encounter if we cut buildings where the computer design says. It is therefore recommended that in the within city limit sections, the designs be modified manually to reduce unnecessary land takings while at the same time ensuring adequate space for efficient BRT operation, and mixed-traffic and pedestrian flow.



14. A comprehensive study to review and recommend in regard to the access cum parking issues along the corridor is therefore strongly recommended.

15. **Alternatives Analysis.** The Mission was apprised of the status of the key alternatives that had emerged through consultations and interactions with Project affected persons.

- Alternatives already evaluated and documented as FAQs: Several commonly asked questions regarding BRT design such as need for BRTS, need for 4 versus 2 lane BRTS, need for going into city limits etc. already evaluated in the DPR had been presented as FAQs in simple easy to understand language.
- The rail option versus the BRTS between Hubli-Dharwad has also been included as part of the FAQs. This will be profiled in the updated project documents.
- The one way option in Dharwad via Hanuman Temple had been evaluated and its results regarding the significant additional impacts to commercial establishments and religious structures compared to the proposed alignment have been communicated to the Dharwad based group of landowners.
- The option of extension of the Rail-Overbridge at Nevalur on the Right Hand Side (RHS) in addition to the proposed Left Hand Side (LHS) has been evaluated and been discussed with affected parties. A final decision is expected soon.
- The realignment of the BRT to adjacent vacant land in order to bypass the Dargah has also been evaluated and discussed.
- The proposal for flyovers instead of vehicular underpasses at four locations along the corridor (Navanagar, Bhairidevarkoppa, Unkal Lake and Unkal Cross) has been evaluated and largely finalized.
- The Dharwad Land Owners Association have requested DULT/ HDBRTS for a flyover option for the BRTS within Dharwad city limits to be studied. The Group met with the Bank during their visit and formally handed over a copy of the request to them as well. DULT is in the process of examining the same.
- The option of reduced RoW in between station sections within city limits versus the current proposal for a uniform 35 RoW should also be evaluated.

It was agreed that these alternatives outlining the analysis in terms of the operational/ technical feasibility, costs, social and environmental impacts would be documented in the DPR/ safeguards documents.

16. **Social Safeguards:** The Bank team held discussion with HDBRTSCO Limited and the consultants on the implementation progress in land acquisition and resettlement. The following is the outcome of the discussions and agreed next steps.

17. **Joint Measurement Survey (JMS) of affected private properties.** Though this survey has been substantially completed, its behind schedule. This survey could not be completed in two key locations, i.e. ROB at Navlur, where good number of families are likely to be displaced and around Dharga area, where the project could not succeed for realignment to avoid the impacts to Dharga. The final reports on the outcome of JMS are under preparation. It is expected that the extent of land acquisition will increase and there could be higher number of affected families. The number of impacts to non-title holders is expected to go up to 74 from 13 identified in RAP. It is learnt that about 280 petitions were received in response to land acquisition notification related to reduction of width, (163 petitions); compensations enhancements (74 petitions) and other concerns such as Re-JMS (16 petitions), fly overs at certain locations (12 petitions),etc. The project authorities have responded to most of these petitions and some other replies are expected to be sent shortly. The additional, impacts arising due to JMS will be captured in the addendum to RAP.

18. The Bank team was informed that a preliminary meeting with affected land owners of 3 villages (Amargol, Rayapur and Sattlur) was held recently, where the people expressed their views on higher

compensation. The other requests came up during this meeting was a request for additional Floor Area Ratio (FAR) and relaxations in setback restrictions.

19. The valuation of affected properties, trees and horticulture crops is in progress. The Bank Team clarified that while evaluating the cost of affected structures, depreciation should not be taken into account as per the policy provisions and this needs to be clarified to those involved with the valuation process. The mission also advised to engage market valuers to speed up the process of structure valuation.

20. **Focus Group Discussions.** The consultants supporting RAP implementation are now engaged in consultations with various affected groups to explain the entitlements and also elicit their concerns and expected support for the project. In this process the consultants have organized an orientation program to the affected non-title holders on the available opportunities for income generation activities. It was agreed with DULT and HDBRTSCO that a large consultation workshop shall be organised following completion of JMS to inform interested stakeholders about the Project, alternatives, and final impacts.

21. **Negotiations with Religious structure owners.** In all 15 religious structures will be affected to varying degrees. There is good progress in negotiations with most of the affected religious structures. At the end of the negotiations, the outcome is concluded into a written undertaking for further follow-up from both the sides. It is expected that there is will be satisfactory outcomes in most of the affected structures except 2-3, where finding an alternative land for shifting of the affected structures maybe difficult to find.

22. **Commissioning of M&E consultants for RAP Implementation.** Centre for Management and Social Research, Hyderabad is commissioned as M&E consultants for RAP implementation. The assignment is for 24 months. The Bank team met and discussed their proposed work program and offered suggestions on how to make their involvement more effective in realizing the objectives of RAP implementation. The consultants will prepare Quarterly Reports summarizing their findings and suggestions to address any implementation issue that may arise during their follow-up.

23. **Website.** HDBRTSCO has launched their own web site recently. The web site has a lot of information on land acquisition, RAP, Frequently asked Questions (FAQ), procedures for grievance redress process, etc. It will be further strengthened with additional details on outcome of public consultations, etc.

24. **Communication and Outreach Consultancy.** As part of this consultancy, posters, brochures, leaf lets, etc. on land acquisition, entitlements, grievance redress process, etc. will be developed. These will be used during private land acquisition negotiations and dissemination of project impacts and available mechanisms to deal with those impacts as part of project implementation.

25. **PAP concerns.** Two groups of PAPs (Business establishments at Dhārwad and Car show room owners) visited the project during the Bank Team's visit to submit their memorandums to the project authorities. The group from Dharwad wants the SPV to consider the option of flyover within the city to avoid impacts to shops and car show room owners are pursuing for the reduction of road width and changes to avoid impacts to car show rooms. The project authorities will send detailed responses to these groups on their requests and the feasibility of their suggestions.

26. **Agreed Next Steps.** The following updated time table was discussed and agreed for completing the following key actions related to land acquisition and resettlement implementation.

No	Actions	Responsibility	Target Date
1	Final Land Acquisition Notification for entire corridor	HDBRTSCO/KRDCL	15-Sep-13

	except Navalur and Bhairvarakoppa		
2	Issue of ID Cards to affected non-title holders	HDBRTSCO	30-Sep-13
3	Consent Award Notification for 3 villages (Amargol, Rayapura and Sattlur)	HDBRTSCO/KRDCL/ Negotiation Committee	31-Oct-13
4	Signing of MOUs with Religious Structure Owners	HDBRTSCO	30-Sep-13
5	Addendum to RAP reflecting additional impacts	HDBRTSCO	31-Oct-13
6	Consultation Workshop	HDBRTSCO	10-Oct-13
7	Consent award Notification for entire corridor	HDBRTSCO/KRDCL/ Negotiation Committee	31-Dec-13
8	Payment of R&R assistance	HDBRTSCO	Simultaneously with Award announcements for respective villages

27. **Environment Safeguards and Management.** The discussions covered findings of the JMC, next steps in the JMC report finalization, revision to the EA documentation in line with JMC findings, documentation of analysis of alternatives examined, and implementation of EMP for road works for which the contractor is on-site.

28. **EA Update:** The mission noted that the joint measurement survey has been completed for almost entire corridor, except in Navalur and Bharideverakoppa villages. The key additional impact that has been identified pertains to the private trees that need to be cut for the widening to 8lane configuration. Currently, the number of trees to be cut has increased by 817. HDBRTS team expects this number to reach 1000, including the remaining portion of road in Navalur, and Lakkamanahalli (for which data processing has been delayed due to health of the enumerator). Of the 817, 229 are fruit bearing trees and the rest are non-fruit bearing. Tree valuation for these for purposes of compensation to their owners is being done by the Forest Department. In line with the EMP provisions, HDBRTS has also agreed to plant additional saplings as per ratio of 2 saplings for each tree to be felled. The potential for saving/transplanting would also be examined.

29. Discussions also covered the various options proposed by stakeholders which have been or are to be analyzed. The mission advised that the revised documents should describe how the environmental impacts of credible options have been factored into the decision making process. These would include tree-cutting, noise level increase, ambient air quality changes due to emissions of pollutants, etc. This exercise would form a key part of the additional Analysis of Alternatives that are identified as operationally/technically sound.

30. The mission was also informed that the proposed deepening of the lake at Rayapur is likely to be reviewed. This is being done to avoid concern raised by some environmental groups about indiscriminate deepening of lakes in Bengaluru. The HDBRTS team will consult with the Lake Development Authority, GoK, and carry out a quick study to verify the efficacy of the proposed deepening. If the study finds that the depth in the lake at Rayapur needs to be restricted, before the volume of the lake lost due to filling up by the embankment for the road corridor, it is proposed that some of the other lakes in the area would be expanded / deepened. The mission advised that this study should be completed very quickly and final decision regarding the extent of works in the lake at Rayapur be confirmed and recorded in the revised EA documents.

31. HDBRTS team has agreed to provide amended or supplementary drafts of the EA documents including EIA for the project and EMP for roads by September 30, 2013.

32. **Tree Plantation:** The mission was pleased to note that HDBRTS team is confident of completing the target of planting 8000 saplings during the current rainy season. This is based on their achievement so

far, which is about 5410 saplings already planted and the contract already in place for all 8000 along with a preliminary list of locations where these would be accommodated. This ensures that the first phase of the Green BRTS plan that will plant more than 18000 saplings over the course of project implementation is on schedule. The mission noted that the institutions, whose premises are used for the plantation, mostly schools and colleges, are being provided incentives to ensure healthy growth of saplings being planted. The key issue would be how these would be tended to during vacations in the institutions. Another item that was discussed was that the criteria to determine health of various species that have been planted would be shared with these institutions so that there is clarity of expectations at the end of the year for the award of the incentives.

33. Discussions also covered the proposal for a 1.0m wide planting space, instead of the original 0.75m wide planting space for avenue plantation. HDBRTS team was of the opinion that widening this space would inconvenience pedestrians. The mission requested that this issue be deliberated further and guidance on such urban settings be reviewed before a final decision is made on the size of the planting zone, especially since it is not expected to be slots and not a continuous strip.

34. The mission visited one school on the outskirts of Dharwad town, where 20 saplings have been planted and discussed with the stakeholders in the plantation program – HDBRTS officials, school management team, and the contractor and local NGOs taking the lead in this activity. One concern that needs to be addressed is identification of saplings planted since the current method of tagging suffers from the disadvantage that the tags are easily removable, and were seen to be removed from 2-3 saplings in the school compound. The mission urged all stakeholders to consider alternative methods/processes to ensure that this tracking mechanism is in place.

35. It was agreed that these issues would be deliberated by the Green BRTS committee which has already been constituted by the Deputy Commissioner, Dharwad, in its upcoming meeting, which can take place once the restrictions due to the code of conduct for elections has been lifted. The mission requested that HDBRTS team update the Bank team about the decision of the committee on these aspects when it shares the draft EA documentation.

36. **Safety concerns:** The mission again highlighted the need for adequate signages and safety related measures along the corridor where several stretches continue to be under construction without any marking/warning. The mission advised the HDBRTS team to ensure that the signages and devices such delineators are put in place so that this critical item is not missed out. The KRDCCL executive engineer, who was present, agreed that these would be done on top priority and completed immediately. Since the PMC for the road works is not performing satisfactorily, and the PMC for BRTS infrastructure packages has just begun mobilizing its full team, discussions led to the conclusion that the environmental specialist from the latter can assist the KRDCCL team in the interim period. The mission requested that an update on the improvements to site safety be shared with the Bank as soon as possible.

37. The mission noted that the HDBRTS company website is now online. It also noted that the current EA documentation, Green BRTS plan, and other relevant documents are now displayed there. The website also provides update on plantation already carried out. The mission suggested that the relevant documentation from the Green BRTS committee meetings could also be made available on the website, after deliberating the same in the committee.

38. **Communications & Consultations.** The Mission reviewed the progress to date in regard to agreed communication actions and also interacted with the Communications Consultants hired for the Project. In the terms of progress to date,

- (i) A consortium comprising the IBI Group and CEE have been appointed as communications consultant to the project and this group has begun working since 16th July 2013. The group has submitted their inception report and workplan. The consultants are now working on developing a master presentation about the project which provides the rationale and salient features about the project to the general public. Plans are being developed to roll out a user expectations survey to capture public transport users' experiences of using the current bus services between the twin cities (i.e. Hubli and Dharwad) and their knowledge and expectations about Bus Rapid Transport (BRT) services. HDBRTCO and DULT envisage this survey to be an outreach tool itself to inform the users about the project and attempt to get their buy-in for the same. In addition, the consultants are also working on developing a name and a logo for the HDBRTS and planning to roll out an outreach programme targeted at school children in the schools where the company has planted trees.
- (ii) In the meantime, HDBRTCO has already established a Public Information Centre (PIC) within their office premises and have begun furnishing information about the project in the centre. However, this is still in a nascent stage and needs to be further equipped with information material and dedicated resources.
- (iii) DULT has also set up a website - <http://www.hdbrts.co.in/> - wherein information about the project is made available to a wider audience. The website contains reports of studies / assessments carried out under the project and a section on Frequently Asked Questions (FAQs) about the project. The website is managed by a third party vendor (based in Bangalore) appointed by DULT. The website also gives a link to a Facebook page for the company. However, this link is currently inactive and does not automatically take a user to the Facebook page for the company.
- (iv) In addition, project staff (primarily the Managing Director of HDBRTCO and the Chairperson of the company) meet with different stakeholder groups at regular intervals to address their queries and concerns about the project. Through this mechanism and the compensatory tree plantation drive that has been already been undertaken, opposition from one key stakeholder group – the environmentalists – have, by and large, been mitigated. The RAP consultants – STEM – have also been meeting with PAPs² on a regular basis and addressing their queries and concerns through these interactions. Barring members of few influential stakeholder groups (vehicle dealership owners, hoteliers, local politicians (MLAs³ likely to lose some land / parts of built up structures in the course of road widening under the project and the District Minister for Hubli-Dharwad) and religious groups), it appears that the concerns of a majority of PAPs have been addressed and their buy-in for the project is more or less a *fait accompli*.

39. Assessment of communication interventions undertaken till date and concerns:

- (i) The communication activities and interventions that have been undertaken by the company have primarily been reactive in nature. This, however, is slowly changing to a more proactive process.
- (ii) From a strategic communications perspective, some of the key steps – i.e. a stakeholder perceptions mapping, stakeholders' concerns and communication needs assessment, stakeholders influence (over the project) mapping – are yet to be undertaken in a rigorous manner. Whilst this does not imply that the key officials from HDBRTCO are completely

² Project Affected Parties

³ Members of Legislative Assembly

unaware of the outcomes of the above exercises (as they have been engaging with different stakeholders from time to time in different fora), having these inputs would greatly help in calibrating proper communications with different stakeholders and taking charge of a proactive communications process and *influencing* positive opinions about the project.

- (iii) The institutional structure and mechanisms for proactive communications is weak and in the absence of defined structures and protocols, the Managing Director of the company is the *de facto* spokesperson for the project. Protocols for communications with different stakeholders; collection, collation and analysis of feedback from different stakeholders that would inform the responses to concerns / queries are absent. In the course of discussions with HDBRTCO officials, the communication consultants and the RAP consultants, the World Bank team suggested ways to operationalize the latter with simple formats that would help in capturing the critical feedback. This would, over a period of time, help the company in keeping records of the public perception about the project at different phases of the project and help in informing the company's communications with different stakeholders.
- (iv) While making the website live is a very good initiative, it was not clear whether any clear protocols have been established for content creation / generation and uploading. The website is currently being managed by a third party vendor based in Bangalore and supervised directly by DULT. Ideally, HDBRTCO would need to perform the role that is currently being performed by DULT. Moreover, the web-site is mostly static (i.e. just provides information about the project). How well some of the dynamic features (feedback / complaints for e.g.) are functioning could not be assessed as the web-site has just been launched recently and the traffic to the site is yet to pick up significantly. Other features – like the Facebook page link – requires the resources and protocols to engage with a wider audience through social media to be put in place, for it to be effective. Moreover, the web-site can be made far more dynamic with provisions for direct interactions with the MD / Chairperson of the company over webinars, etc. on a fixed date and time once every fortnight or so. A project implementation tracker explaining at which stage the project is in at any particular date in relation to the whole project implementation cycle would also be very useful.
- (v) As of date, the project lacks proper communication collaterals (brochures, flyers, infographics, CDs, etc.) that can be handed out to people seeking information about the project. The processes that have been set in place – the PIC and web-site – are primarily platforms that facilitate “pull communications” (i.e. seekers of information about the project have to make efforts to visit the PIC or the web-site to pull out information from these platforms), parallel mechanisms for “push” communications like the communication collaterals and outreach platforms like project information seminars for targeted stakeholders, individual / group meetings, media open houses, etc. will have to be initiated to change the nature of communications from “pull” to “push” and a combination of both.
- (vi) Related to the above, the project will greatly benefit from stakeholder specific communication collaterals. Different stakeholders have different communication needs / concerns about the project. Therefore, customizing (to the extent possible) different collaterals which furnish information that would satisfy the specific communication needs / concerns of different stakeholder groups would be very beneficial for the company. While generic communication collaterals based on the information already contained in the website and reports / documents available with the company can be developed fairly quickly, taking the steps mentioned in point (a) above will help in developing customized communication collaterals for different stakeholders.

- (vii) The project is still to develop a consistent messaging strategy (and key messages & take aways) about the project and what it means for the people of Hubli-Dharwad. The required inputs to develop these are available (through the outputs of various studies, interventions, etc. that have been undertaken), but are yet to be effectively woven into a consistent storyline.
- (viii) It was also felt that a clear prioritization of communication activities / interventions (i.e. setting proper communication objectives for the project, prioritizing activities / interventions in order of importance, undertaking the required background work and thereafter engaging effectively with stakeholders with the help of collaterals, information, etc.) is yet to be undertaken. In the absence of this, the current communications between the company and various stakeholders are reactive and appear to be ad-hoc.

40. **Actions required in the immediate term:** The following actions would be required to be undertaken on an urgent basis and implemented within the next three months

- (i) *Develop key messages and information takeaways about the project:* It is recommended that the communication consultants facilitate a brainstorming session with HDBRTCO officials and develop a set of messages and information takeaways about the project at the earliest.
- (ii) *Development of generic communication collaterals:* Once the messaging and information takeaways have been agreed upon, generic communication collaterals that are informative and attractive have to be developed and produced. For specific stakeholder groups whose concerns / points of opposition to the project are already known, it is recommended that specific collaterals – presentations, letter templates, etc. – be produced at the earliest incorporating key messages and arguments / information / statistics that could counter their specific reasons for opposing the project. It would need to be ensured that the key messages and information takeaways about the project are strategically included in the communication collaterals.
- (iii) *Undertake steps mentioned in Para 36 (ii) in regard to stakeholder perception mapping and prioritize communication intervention.* Based on the above a comprehensive analysis of stakeholders' communications needs, concerns, perceptions and influence, a comprehensive communications strategy and action plan could be developed. The communications strategy should necessarily incorporate specific strategies for engagement with (a) media, (b) social media, (c) politicians and other influential stakeholders, (d) overall advocacy about the project and have action plans with associated budgets, timelines for implementation as well as a clear delineation of roles and responsibilities of the HDBRTCO officials, DULT, and the communication consultants and a tool for monitoring the impacts of the communication interventions. The communications strategy should not be treated as a one off, stand alone document, but a roadmap for engaging effectively with different stakeholders at different stages of the project.
- (iv) *Media monitoring and analysis:* Reports about the project appearing in different media (print, audio, audio-visual, internet) will need to be monitored on a regular basis and senior officials of the company would need to be regularly briefed about this. To enable an effective monitoring of media reports, the World Bank consultant helped the Social Development consultant of HDBRTCO (currently mandated to keep track of media reports) to develop a simple MS EXCEL based tool that would help proper archiving and analysis of media reports. Over a period of time, this will be very useful for engaging effectively with the media.

41. **Provision of day-to-day tactical support for communications:** HDBRTCO has realized that it would be critical to have a dedicated resource for all communications. In keeping with this, there are

plans to hire a Public Relations Officer (PRO) for the project. The PRO would need to work closely with the senior HDBRTCO officials as well as the communications consultants and other teams to implement various communication activities. Till such time that a full time PRO is hired, it is recommended that the communications consultants provide a dedicated resource to be based in the PIC to support the company's communication activities.