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

# Tenth Implementation Support Mission and (November 12 –28, 2013)

#### Aide Memoire

#### I. Introduction

- 1. A World Bank mission<sup>1</sup> visited the Ministry of Urban Development, state and city officials of participating cities and held discussions on the Project to review overall project progress and performance. The Mission met with the Project Management Unit (PMU) within the MoUD and Project Management Consultants (PMC) and visited Pimpri-Chinchwad and Hubli-Dharwad, and held discussions with officials from Naya Raipur and Indore in Delhi and with officials of KSRTC (regarding Mysore) in Bangalore. During the meetings, the mission had an opportunity to interact with the city Project Implementing Units (PIU) as well as various consultants, contractors and NGO's assisting the PIUs with project preparation and implementation. The mission would like to express its appreciation for the hospitality extended, the useful discussions arranged and for the excellent arrangements made for the field visits.
- 2. The main mission objectives included the following:
  - Review implementation progress in demonstration cities under the project
    - **Hubli-Dharwad** Review progress in regards to (i) RAP and EIA/EMP updation; (ii) Alternatives Analysis and finalisation of alternative; (iii) Implementation Schedule; (iv) communications strategy and consultations; (v) completion of safeguards actions; (vi) progress on TAs; (vii) Requirement for additional GEF resources
    - Pimpri-Chinchwad Review overall project progress in regard to (i) BRT implementation schedule; (ii) Service Plan Corr 1 & 2; Corr 3 & 4; (iii) Progress on Empire Estate Flyover; (iv) Progress on Station, Terminals and ITS procurement and award; (v) Progress on safeguard issues (vi) and TA activities; (vii) Change of Disbursement ratio for GEF grant
    - Naya Raipur Review project progress with regard to (i) NMT procurement and designs of missing links; (ii) Railway Station; (iii) TOD Study; (iv) other consultancies
    - Indore Review project progress including (i) procurement of ITS; (ii) TAs
    - **Mysore** Review M&E Reports and proposed remedial actions to address observed hardware failures; progress on COSA study
  - Assess the implementation progress under Component 1B
  - Discuss progress in key procurement activities
  - Review FM aspects

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3. The mission shared the key findings of the Mission during the Steering Committee Meeting on November 25, 2013, in the presence of the Committee Chairman & Secretary,

<sup>&</sup>lt;sup>1</sup>The mission consisted of Nupur Gupta (Task Team Leader), Ke Fang (Urban Transport Specialist), Shigeyuki Sakaki (Urban Transport Specialist), I.U.B. Reddy (Social Specialist), Gaurav Joshi (Environment Specialist), Rohit Gawri (Information Analyst), Debabrata Chakraborti (Procurement Specialist), Neha Dhoundiyal (Financial Management Analyst), Sona Thakur (Communications Specialist), Gerhard Menckhoff (Public Transport Specialist – Consultant), Ishita Chauhan (Research Analyst), Anindo Chatterjee (Consultant - Communications) and Neetu Sharda (Program Assistant).

MoUD, Dr. Sudhir Krishna, National Project Director, Mr. S.K. Lohia (OSD, Urban Transport, MoUD), National Project Manager, Mr. I.C. Sharma, the city officials and the Project Management Consultants. The Mission also debriefed Ms. Aparna Bhatia, Director, DEA, on December 2, 2013. The summary of Mission highlights includes the following:

- Overall Project Project progress has picked up with the initiation of procurement and contract award in both Naya Raipur and the newly inducted city, Hubli-Dharwad. Roughly 50 percent of the IBRD funds have now been committed compared to 33 percent in June 2013. This is expected to improve to 65 percent by January 2014. The commitment level for GEF grant funds stands at over 60%. The disbursements are also presently more or less in line with projections. As such, the implementation progress rating is retained at Moderately Satisfactory.
- **Pimpri-Chinchwad** While PCMC is now gearing up to closely monitor timebound launch of BRT corridors, slow progress on land acquisition and resettlement activities remained major areas of concern. In particular, long delays of upto 2 years in relocating affected people in EWS housing as also the delays in rectifying non compliances is becoming a serious issue;
- Naya Raipur Procurement of public transport infrastructure has been concluded and that of the second major package on NMT is underway;
- **Hubli-Dharwad** HDBRTS has made progress with procurement having awarded the first package and in advanced stages of procurement for the next 2 packages. It has evaluated various alternatives in response to concerns being raised key stakeholders and project affected people and is in the process of finalizing the same. Communications have improved; however, traffic safety issues on the corridor need attention;
- **Indore** In Indore procurement of the ITS system is in advanced stages. However, the recent PIL against the BRT has created some uncertainty around the BRT Project, although the administration seems confident of resolving the matter.
- Mysore The hardware failures of on bus units in the ITS Project are being resolved.
   KSRTC must closely monitor the agreed action plan for timebound resolution of the issues
- For the GEF funded components, there is need for (i) change in the disbursement ratio for Pimpri Chinchwad, and (ii) clear reallocation plan for unutilized funds.

## II. Key Project Data

Key Project Data		Current Ratings and Flags		
Board Date	Dec 08, 2009		Previous	Current
Effectiveness Date	May 5, 2010	Development Objectives	S	S
Closing Date	November 30, 2015	Implementation Progress	MS	MS
GEF Grant	US\$ 20.33 mn	Project Management	MS	MS
IBRD	US\$ 105.23 mn	Safeguards	MS	MU
		Procurement	MS	MS
		Financial Management	MS	MS
Disbursed Amount GEF	US\$ 4.5 mn	Problem Flags	Nil	One
IBRD	US\$ 26.6 mn			

**HS**=Highly Satisfactory; **S**=Satisfactory; MS=Moderately Satisfactory; MU=Moderately Unsatisfactory; **U**=Unsatisfactory; **HU**=Highly Unsatisfactory; **NA**=Not Applicable; **NR**=Not Rated

## III. Key Agreed Actions

4. The following actions have been discussed and agreed:

Actions to be Completed	By when	By whom	Status
Finalize proposal for restructuring of GEF	Dec 31	PMU	Status
allocations			
Complete updation of Procurement Plans/	Dec 20/ Dec 31	PMU/ PIUs	
contract packages			
Ensure recertification of audit objection	Jan 31	PCMC	
amount in PCMC			
Ensure provision for Indore Project in state	Dec 10	AICTSL	
budget FY14-15			
Submit status update on key agreed actions	Dec 15/ Jan 15/	PMU	
	Feb 15		
Strengthen PMU – Add Planner	Dec 31	PMU	
Extension of PMC Contract	Dec 31	MoUD	
Expedite procurement of Component 1B		PMU	
activities:			
PC1B8 contract signed and inception report	Dec 15		
submitted			
PC1B9 – Issue RFP / Draft Contract	Nov 25/ Dec 31		
New activity on Barrier Free Access –	Dec 15		
Finalise ToR and issue EoI			
Prepare brief description and cost estimate	Dec 10		
of additional activities			
Expedite execution:	~ -		
Submit Inception Report for PC1B 7	Dec 5		
Select cities and submit city specific plan	Dec 15/ Mar 15		
for PC1B1,2 and 3	I 21		
Launch the 3 <sup>rd</sup> Leaders Program Training	Jan 31 Dec 31		
Finalise National Research Program Design Submit GHG Emissions Baseline and 1st	Dec 31/ Jan 31		
emission reduction report	Dec 31/ Jan 31		
emission reduction report			
Progress on agreements reached with	Continuous	Pimpri-	
Empire Estate Contractor	Continuous	Chinchwad	
Submit Monthly Progress Report on Empire	Continuous	Cimiciwad	
Estate Contract	Continuous		
Confirm approach for procuring passenger	Dec 15/ Jan 15		
access to BRT stn on Nashik Phata Flyover/			
initiate procurement			
Submit updated BRT Implementation	Dec 7		
Schedules for Corridors 1-4			
BRT Station bids awarded for Corr 3&4	Jan 1		
ITS bids issued/ awarded	Dec 15/ Mar 31		
Terminal interim solutions finalised for	Dec 15/ Dec 21		
Corr 1&2/ bid out			
Submit Revised Service Plan for Corr 1&2	Dec 15		
Submit Draft Service Plan Corr 3&4	Feb 1		
Submit Revised Action Plan for addressing	Dec 31		
Road Safety on BRT Corridors	- ·		
Submit draft ToRs for ToD study	Dec 15		
Finalise modalities of hiring BRT Advisor	Dec 15		D 1 1/1 *
Substantial completion of pending land	Mar 31		Delayed (since June
acquisition			2013)
Action plan for 60 displaced families	immediate		D 1 1/1 0 1
Resettlement of squatter families to new	Dec 31		Delayed (since Sept.
houses	Nov. 20/D 21		2012)
Complete verification/ Allotment of	Nov 30/Dec 31		Delayed (since

Actions to be Completed	By when	By whom	Status
alternative EWS houses	•	,	Sept. 2012)
Hire NGO to support resettlement	Dec 15		. ,
Clear construction material from River	Nov 30		
Improve EE Camp Site	Nov 30		
Improve Transit Camp facilities	Dec 31		
Submit BER for NMT contract package	Jan 31	Naya Raipur	
Submit DPR for ITS/ submit Draft Bidding	Nov 25/ Dec 2/	1 tu yu 1 tu 1p u	
documents / Initiate Bidding	Dec 31		
Submit revised designs for NMT	Dec 7		
improvements – Capital Complex, Sec 27	Dec 1		
Submit BRT Lite Implementation Sched			
Issue EOI for Consultancy for detailed	Dec 31		
service plan for BRT lite launch	Dec 31		
TOD study – final report submission/	Dec 15		
Submit proposal for additional	DCC 13		
implementation support			
PIU Strengthening – NRDA staffing to be	Dec 15		
completed.	DCC 13		
Submit revised M&E Report	Nov 30		
Construction Supervision Consultancy	Nov 22		
(CSC) – Draft initialled contract	NOV 22		
Draft initialled contract for RMP	Nov 30		
	Dec 31		
Clear backlog of Consultant payments Submit revised Env & Social Assessment of			
	Dec 15		
Railway Station	N 05/E1 1	T 1	
Submit prebid minutes & addenda / BER	Nov 25/ Feb 1	Indore	
for ITS	E 1 15		
Submit TER for BRT Accessibility Study	Feb 15		
Finalise post Project M&E arrangements	Dec 15		
Submit ToR/ Issue EoI for AICTSL	Dec 20		
Business Plan	D 21		
Complete AICTSL strengthening	Dec 31		
Submit Request for Change in Project	Dec 7		
Description to MoUD/ DEA	N. 05		
Submit ITS Remedial Action Plan	Nov 25	Mysore	
Review meeting with MoUD/ WB	Dec 15		
Rectify pending issues and have a fully	Jan 31		
functional ITS system			
Submit Revised CSOA study Inception	Nov 22		
Report/ Replacement of Key Staff	D 4		
Submit Proposal for additional Funding	Dec 2		
Sub mit M&E survey report	Continuous		
Submit BER for Pkg 10/ Complete award	Jan 10/ Feb 10		
for Pkg 9 &10			
Submit bid document for pkges #1, 4, 5, 6	Dec 5, 10, 15		
Complete evaluation of alternatives &	Dec 15		
finalise option – Dharwad/ RoB/ Dargah			
Submit updated BRT Impl Schedule	Dec 2		
Submit updated EIA/EMP and RAP	Jan 31		
Payment of R&R to 7 squattors	Nov 30	Hubli-Dharwad	
Complete final notification of land	Dec 31		
Complete land award of 3 villages/	Dec 31/ Feb 28		
Complete compensation award 10 villages			
Traffic Management improved on road	Immediate		
corridor			
Finalise contracting strategy for 4 to8 laning	Dec 31		

Actions to be Completed	By when	By whom	Status
Strengthen communications at			
HDBRTSCO- PRO in place	Dec 31		
Create link to SUTP website	Nov 30		
Public consultations on revised designs	Dec 31		
Submit proposal for additional funds			
Contract award to PMC for ITS	Jan 15		
Submit EoI shortlist/ issue RFP for	Jan 7		
Consultancy on CityPlan			
Submit final DPR for Mysore PBS with	Dec 15	DULT	
funding strategy			
Submit note on implementation	Dec 15		
arrangements			
Complete FM & Procurement Assessment	Dec 15		
Questionnaire			
Prepare contracting strategy & bid	Jan 31		
documents			

# IV. Project Development Objectives

- 5. The project's development objective (PDO) is to promote environmentally sustainable urban transport in India and to improve the usage of environment-friendly transport modes through demonstration projects in selected cities. The Project aims to achieve this objective by supporting the implementation of India National Urban Transport Policy (NUTP), particularly those aspects of the policy that emphasize, (i) priority to the use of public transport; (ii) priority to non-motorized transport; and (iii) capacity building for developing and implementing sustainable transport systems (at both national and local levels). The key overall indicators to measure performance in achieving the project development objective are:
  - The number of cities that develop an identifiable urban transport planning process (i.e., managed by professional units of government, following certain procedures and guidance, and involving various level of analytical work) increases.
  - Mode shares in Pimpri-Chinchwad, Hubli-Dharwad and Naya Raipur become more sustainable by project end.
  - A significant amount of co-benefits are achieved as forecast transport CO2 emissions in the demonstration cities are lower than their "business-as-usual" or "without-project" forecasts.
- 6. The Leaders in Urban Transport Planning training, under Component IB, introduced in CEPT University as well as those taking place in Singapore and Seoul, are ensuring exposure to urban transport officials and decision makers to the complexities and multi-faceted nature of the issues. The mentoring support being offered by CEPT helps officials refine their live projects in work life under guidance of experts. The highly positive feedback on the course suggests that it is having the intended capacity development impact on the urban transport fraternity. Two batches have undergone training at CEPT University covering 64 officials from across the country. The target is to train roughly 200 officials from across the country by the end of the Project. The technical assistance activities in regard to assistance with implementation of reforms such as creating and implementing Unified Metropolitan Transit Agency's (UMTA), urban transport funds, national public transport helplines, transit oriented development in cities in India, and development of a Research Facility within MoUD, are ongoing and are expected to contribute towards capacity building efforts for Indian cities and promote sustainable urban transport practices.
- 7. Among the city demonstration projects, the Mysore ITS project implementation has been completed and its performance is being closely monitored. This is a first of its kind ITS project in

India and other cities/ STUs in Karnataka are visiting the Mysore project to learn from the experience and replicate in their cities and STUs. KSRTC has already begun the scale up of the pilot from 500 buses to its entire fleet of 4000 buses from additional funds granted by MoRTH.

8. The other cities, Pimpri-Chinchwad, Naya Raipur, Hubli-Dharwad and Indore are in various stages of project implementation and are in the process of implementing various best practices that if implemented well would ensure project sustainability. In Naya Raipur, the launch of the interim bus service along with the State Secretariat in the new state capital has resulted in a public transport mode share of 40 percent already.

For the above reasons, there appears to be a reasonable likelihood of achievement of PDO.

9. The Mission noted that the PDO indicators in regard to more sustainable city mode shares appeared somewhat ambitious since such changes are not instantaneous and unlikely to be evident immediately following Project launch. These become apparent only in the mid to longer term. It was agreed that this aspect would be reviewed further and changes made as necessary.

## V. Current Implementation Progress

- 10. **Overall Status**: The Mission rates the overall project progress as *Moderately Satisfactory*. The major project restructuring involving mainly cancellation of funds from Pune and their allocation to Hubli-Dharwad was completed early this year. There has been reasonable progress in the actions identified during the previous missions.
- 11. Component 1B has made continuous progress since the last mission. Out of the 10 activities proposed, 7 are ongoing, 2 are in advanced stages of procurement, and 1 is being prepared. The training program "Leaders in Urban Transport Planning" held its second session at CEPT University of Ahmedabad in August 2013, and is now preparing to launch the third round of in January 2014.
- 12. As regards the Component 2 on the City Demonstration Projects, each of the five cities has made progress since the last mission, although issues remain. In the case of Pimpri-Chinchwad, the civil work of Nashik Phata Flyover is substantially complete; the Empire Estate Flyover contract progress continues to be inadequate although indications are that it will now improve; Progress on land acquisition and resettlement in particular was not satisfactory. In Naya Raipur, Hubli-Dharwad and Indore procurement of major contract packages is underway. The ITS system in **Mysore** has been implemented. It has encountered initial system troubles and is in the process of evaluating the effectiveness of remedial measures.
- 13. While project disbursements are just over 20 percent after three years of implementation, this is primarily on account of the non-performance of Pune and delays in finalizing packages in Naya Raipur. The progress on procurements has picked up and the status of commitment of funds is now close to 50 percent and expected to reach 65 percent by January 2014.

Status of Contract Award and Procurement in Numbers and Value for IBRD

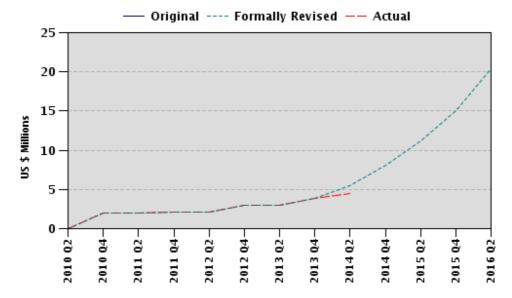
US\$ mn	Awarded		Under 1	Under Procurement		To be initiated		Total	
	#	\$	#	\$	#	\$	#	\$	
PCMC	2	35	0	0	0	0	2	35	
NRDA	1	6	1	7	1	1	3	14	
HDBRTS	1	9	2	11	8	35	11	56	
Total	4	50	3	19	9	37	16	105	
%		48%		18%		35%	10	00%	

14. The city-wise status of disbursement under the loan and grant is provided below. While the GEF Agency Fee of US\$1.88 million was disbursed at the start of the project, it is not reflected in the system. The disbursement percentage for GEF has been indicated factoring this in.

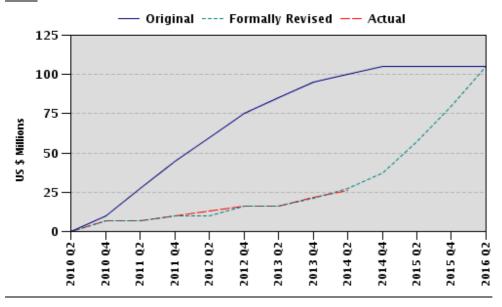
(US\$	million)
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City	Amount Disbursed	% disburse d	Amount Disbursed	% disbursed
	(Loan)		(GEF)	
Component 1B	N. A.	=	1.304	18.50%
Pimpri-Chinchwad	24.3	68	0.492	25.88%
Naya Raipur	1.00	7	0.505	26.58%
Indore	N. A.	-	0.520	27.37%
Mysore	N. A.	-	1.652	86.96%
Hubli-Dharwad	1.00	2	0.034	0.00%
TOTAL	26.6	25%	4.507	24.43%

# <u>GEF</u>



# <u>IBRD</u>



# **Component 1B**Implementation Progress: **Moderately Satisfactory**

15. The mission reviewed the progress on the capacity building component and the updated status is tabulated below:

# **Status of Activities under Component IB**

Sl	Activity	Committed	Status Update
No.		Amount (Rs. Million.)	
1	Development of a structure and an operations manual for UMTA; Business Plan for Urban Transport Fund	24,150,000	State-of-art Review Report submitted. A two day workshop conducted in September 2013. City selection process underway
2	Development of a standard architecture and plan for ITS and Traffic Management Center	20,070,000	State-of-art review report submitted. Workshop conducted in August 2013. City selection process underway
3	Development of a model NMT action plan, bike sharing plan and TOD Guidelines	27,830,000	Revised Inception report awaited in November. First workshop being planned in early December
4	Development of a Research Program	5,530,000	Research Design Report submitted. Presentation to MoUD committee being organised
5	GHG Emissions reduction assessment	28,650,000	Methodology developed, surveys ongoing and Baseline Report expected in December
6	Leaders Program	55,000,000	Project Mentoring for Second round of training ongoing and third round proposed at CEPT in January 2014
7	Impact Evaluation Study for the Bus Procurement under	33,300,000	Contract signed and inception report awaited

	JnNURM		
8	Model Contract Agreements with	5,400,000	Draft contract signed in September
	Private Bus Operators &		2013; Final award of contract pending
	Guidelines for City Bus Services		
9	Preparation of GEF5 Project	11,230,000	Shortlisting completed; RFP to be
			issued
10	National Campaign on		ToR under preparation
	Sustainable Urban Transport		
11	Workshops	30,000,000	
Com	mitted funds - Sub-Total	241,160,000	
	Contingency	24,116,000	
Total Committed funds		265,276,000	
Origi	inal GEF Grant	338,400,000	
Balance Uncommitted funds		73,124,000	

- 16. It is proposed to initiate a study on 'Guidelines for Barrier Free Access' with the balance funds. The matter of uncommitted funds was raised during the Steering Committee Meeting and it was advised to take up additional activities. Some of the areas suggested included:
  - Gender
  - Accessibility
  - Last mile connectivity for metro stations
  - Evaluation of BRT Performance and Case Studies for Delhi, Ahmedabad, Indore.

#### **Component IA**

- 17. Activities under this component are supported / funded by UNDP. These mainly include:
  - Business Plan for IUT
  - 10 Urban Transport Planning Manuals
  - 10 Training Toolkits
  - Dissemination Activity
  - Development of the National Urban Transport Knowledge Management Centre
- 18. The lack of implementation arrangements to ensure effective coordination between the two components and multilateral agencies was a serious design gap highlighted by the UNDP MTR Report. The report recommended inclusion of a representative from the Bank and UNDP in the Standing Committee for regular dialogue and for exploring avenues for involving IUT in the work done at the city level. The Ministry has accordingly been requested to include World Bank into the Standing Committee for Component IA.
- 19. The Bank participated in the 11<sup>th</sup> Standing Committee Meeting and based on the interactions finds that while there has been progress in completing most of the activities and training has begun in earnest, the urban transport Knowledge Management Centre has had two failed tenders and IUT now proposes to develop the same on its own. This in the Banks opinion might be a somewhat ambitious plan given the limited staff available within IUT and the skill profile required to develop such a system.

## **Component 2: City Demonstration Projects**

Implementation Progress: Moderately Satisfactory

Project Rating: Implementation Progress			
Pimpri	MS		
Naya Raipur	MS		
Hubli-Dharwad	MS		
Mysore	MS		
Indore	MS		
Overall Project	MS		

- (i) Pimpri-Chinchwad: The two major civil works contract are at different stages of progress. While the physical progress achieved on the flyover on corridor 3 i.e. interchange section at Nashik-Phata stands at 97% and has achieved substantial completion, the work on corridor 4 i.e. interchange at Empire Estate is progressing slowly and is at about 28%. The Contractor for Empire Estate interchange appears to be fully mobilized now and proposes to complete the work by next year. The timelines for the launch of the BRT corridors have now been specified and there appears to be some momentum in delivering the first two corridors by April and May 2014. The procurements for BRT stations has advanced and for ITS is pending approval from NURM. The long pending issue of the service plan also appears to be moving forward. However, the land acquisition and resettlement activities continue to lag behind and are an area of serious concern. The TA activities funded under GEF are ongoing.
- (ii) Naya Raipur: The procurement of the two major works contractor for BRT infrastructure and NMT infrastructure have made good progress, with one awarded and the other in advanced stages of procurement. The ITS design is being finalized and the package is expected to be tendered out by December 2013. The pick-up point at the Raipur Railway Station shall be developed by the Indian Railways who have asked for a deposit for the work. On the TA activities, the Project Management Consultants for Construction Supervision is expected to be on board soon. Meanwhile, the Transit-Oriented-Development study report is being finalized.
- (iii) *Mysore:* The ITS system for Mysore city bus, rolled out gradually since November 2012 has encountered initial system troubles: estimated time of arrival data is not generated, transmitted and collected at the central server; connection between the server and internet is lost; VMUs failure, some of the VMUs on bus and PIS at bus stops have been vandalized. The vendor and project management consultant have been making efforts to identify and rectify the problems, and KSRTC is now in the process of evaluating the effectiveness of remedial measures. Comprehensive Services and Operations Analysis (CSOA) study has been initiated to further improve the business operation of Mysore city bus service.
- (iv) *Indore:* The BRTS launched in April has encountered disruption due to a High Court order to allow other four wheel vehicles in the BRTS corridor. The PIU feels confident that the order will be reversed shortly. The procurement of ITS is in advanced stages with the bids expected next month. The procurement of consultants for BRT Accessibility Plan is ongoing and AICTSL proposes to finalise the M&E for the remaining life of the Project shortly. AICTSL also proposes to initiate a consultancy on preparing a Business Plan. The mission was pleased to note that AICTSL, as an organization, is now slowly stabilizing with a full time CEO now on board. However, the support staff capacity remains very limited and enhancing this capacity is very critical for efficient operation of the BRTS as well as for managing the ITS system.
- (v) *Hubli-Dharwad*: Procurement of depot works and key consultancy services under the project have been concluded. Tenders for the construction of terminal at Dharwad and Hosur have been invited. The packages for road works, BRT stations and pedestrian works are expected

to be submitted shortly. Consultancy's for communications and outreach program and the monitoring and evaluation consultants for social safeguards and PMC for works supervision are ongoing. While there has been progress on evaluation of alternatives and communication and outreach activities, the land acquisition process for the Hubli-Dharwad BRTS component is quiet delayed.

Details of the discussions with each of these cities are provided in Annex 2-6.

## VI. Key Implementation Issues, Risks and Priority Actions

The key issues that need careful attention and close monitoring are:

- Land Acquisition and resettlement impacts in Pimpri-Chinchwad: Land acquisition and resettlement impacts continue to remain an area of serious concern as they are adversely impacting the progress of works and also resulting non-compliances with social safeguards implementation. The key impediments includes: (i) About 3 Kms of total length of 18.53 Kms (15.92%) is yet to be handed over to the contractors in both Corridors and the delay is more 3 years in handing over of the to the contractors; (ii) in case of resettlement of displaced families, though alternative houses are ready for occupation, these couldn't be allotted due to nonavailability of VIPs for inauguration for EWS houses and pending Maharashtra Pollution Control Board's consent to operate permission in case of resettlement of those staying transit housing; (iii) the project is resorting to demolition of the structure, where the court's rulings are given in favor of PCMC without providing alternative houses and 2 month notice as available under the R&R policy provisions for the project; (iv) the delay in allotment of houses to those living in Transit houses is also resulting prolonged transit housing beyond 18 months planned at the time of shifting; (v) PCMC was unable to submit an action plan to resettle those 60 houses that were demolished in June, 2013 in Khalewadi- Phata-Alandi Road section; and others to be shifted after allotting houses and serving notices, (vi) the project is also faced with inordinate delay in completing the remaining land acquisition due to court cases and lack of updated land records. Going forward, the mission recommends that if the alternative houses to those living in Transit and those who are already displaced are not provided by December 31, 2013 as indicated by PCMC, the mission recommends that hardship allowance should be considered until the alternative houses are provided and PCMC should confirm immediately that they will not restore to demolition of houses until the alternative houses are provided to eligible people and 2 months' notice as available under the project policy provisions.
- 21. Pimpri-Chinchwad Flyover contract on Corridor 4 (Kalewadi Phata-Dehu Alandi Road): The physical progress achieved thus far on the Empire Estate Flyover is only about 28%. In the last Mission it had been noted that the machinery had been fully mobilized and manpower resourcing ramped up. The number of segments cast had also gone up to 6 per week. It had been agreed that if they continued at this rate and increased the pace to 12-14 per week this could be completed over the next 10 months. However, the progress had actually gone down since then to casting of only 3 segments a week in the month of October. The contractor explained that owing to shortage of space they had been constrained in casting further segments. They have also mobilized another gantry and it is expected that they would achieve a target of 60 segments a month by December 2013. There had also been a delay in completing the shifting of Railway Transmission lines and handing over land free of encumbrances. PMU held meetings with Railway officials during the mission to help expedite the transmission lines shifting. It was agreed that PCMC would also try to expedite the handover of remaining pieces of land. PCMC will continue to monitor closely and update the PMU and the Bank on the progress.

- Pimpri-Chinchwad Coordination among key stakeholders: PCMC proposes to launch the Corridor 2 by April and Corridor 1 by May 2014. Similarly, Corridor 3 and 4 are planned to be launched by September and October 2014 respectively. The BRT implementation Schedule, identifying the key activities leading up to the launch including assignment of responsibility was discussed with the mission. The responsibility for the 4 corridors has been assigned to two PCMC officials. With the award of the BRT station packages and likely approval of funding from NURM for the ITS systems there has been progress since last mission. However, it was pointed out that provision for interchange terminals along the BRT corridor 1 and 2 had not been included in the plan. These could become serious bottlenecks to the BRT performance if not addressed in a prompt manner. The matter of traffic signals with priority to BRT also needed to be taken on board for Corridor 1 owing to the complex traffic management and road safety issues. The mission was also introduced to the newly appointed CEO, PMPML, responsible for the BRT Project from the bus operator. PMPMLs Service Plan for Corridor 1 and 2 was discussed at length and comments provided. PMPML agreed to revise the Service Plan, providing for Express Services and outlining the infrastructure requirements along with it. The Mission was pleased to note that with nodal responsibilities assigned to officials within PCMC and the BRT Cell within PMPML now led by a CEO coordination was likely to improve. The Bank also advised PCMC to expedite the hiring of the BRT Advisor which would be critical in this final phase of BRT launch.
- 23. Naya Raipur Payment of Consultant Dues: The PMU and Bank expressed concern over the large consultant dues that had not been cleared by NRDA despite repeated reminders. NRDA promised to clear all pending bills by December 2013.
- 24. *Indore BRT PIL*: The BRTS launched in April 2013 in Indore has hit a major roadblock with the High Court ordering mixed traffic to ply on the lanes reserved for the BRT. This has been in response to a Public Interest Litigation (PIL) which alleges a deterioration in the traffic situation owing to the BRTS. While the procurement of the ITS system is progressing smoothly following the bidder conference, this is a serious development which can undermine the GEF-SUTP Project. AICTSL informed the Mission that they had been working to resolve the matter and were confident that the Technical Committee appointed by the High Court would be reporting in their favor and expected the order to be overturned soon.
- 25. Mysore ITS Project initial issues. The mission was informed of the recent malfunctioning of the ITS system installed for the 458 city buses of Mysore and discussed the causes and the remedial measures for this problem. The mission expressed its serious concern over the delays in rectifying the persistent problems especially with vehicle mounted units (VMU) and requested the PIU and the consultants to prepare an action plan that specifies further actions to be taken by relevant organizations and specify timelines to ensure the system becomes fully operational. The report needs to be based on more comprehensive understanding of the causes of problems in each subset of the system, remedial measures taken to date, and assessment of the effectiveness of such measures. It was agreed that this action plan will be prepared and submitted by November 25, 2013.
- 26. Hubli-Dharwad Land Acquisition: The land acquisition process is delayed by about ten months from the time-line stipulated in the RAP and now expected to be completed by February, 2014. The project has been putting up lot efforts to advance the land acquisition and resettlement implementation as evidenced in the progress in joint measurement survey, continued engagement with project affected people and leaders of affected religious structures and initiation of compensation negotiations with land owners. On the other hand the project is also facing some challenges, which need to be paid attention in going forward. These included: (i) impact due to non-handing over of land due to layout approval conditions and corresponding land records updating, (ii) resistance at Navalur ROB for finalizing the alignment due to impending physical

displacement; and (iii) resistance from some of the religious structure owners to avoid impacts to their religious structures.

- 27. Hubli-Dharwad Corridor Traffic Management: Safety during construction –for vehicles and other road users, as well as workers, remains a very serious concern with roadworks in the Hubli-Dharwad BRTS development. This issue has been flagged for some time now. If identified remedial actions are not implemented beginning immediately and sequentially as per the timelines agreed, the current moderately satisfactory rating on environmental safeguards will have to be downgraded.
- 28. Hubli-Dharwad BRT Implementation and Infrastructure: Procurement of civil works is behind schedule. This is as a result of the design changes prompted by representations from project affected persons and delays in land acquisition. Procurements for off the corridor infrastructure are being finalized. However, its imperative to finalise the alternatives and initiate remaining procurements at the earliest in order to ensure timely completion of the BRTS Project within Project timelines.
- 29. Project Management Support: The Mission was concerned to note the multiple issues relating to processing of clearances and payments that were constraining the effective functioning of the PMU. These ranged from repeated followups in regard to clearances for payment of consultant dues, reimbursements of official attending training, including for the PMU's own operational expenses. This was flagged in the Steering Committee meeting and instructions given to sort out the matter. Its absolutely critical that the process flows and clearances be streamlined within MoUD so the PMU can focus on the Project related issues. In addition, there has been an increase in workload owing to the various training and workshops proposed under Component IB and a proper mechanism needs to be devised to organize these to free up PMU's time for other activities. Finally, the PMC contract which is expiring in Feb 2014 needs to be extended and the procurement of the new PMC expedited to ensure proper and continued support to the Project at this critical stage. MoUD has been requested to address these multiple issues in a timebound manner.

## VII. Safeguards – Environment and Social Management

Safeguards Rating: Moderately Satisfactory

<b>Project Rating: Safeguards</b>	Social	Env
Pimpri	MU	MS
Naya Raipur	S	S
Hubli-Dharwad	MS	MS
Mysore	-	
Indore	-	
Overall Project	MU	

## **Environment Management**

30. Naya Raipur: The mission noted that with the finalization of the site for Interchange at Raipur railway station, the supplementary documentation for EA can now be completed quickly, especially because there are very few adverse impacts likely due to project activities at the selected site. See Annex 3 for details. The mission provided comments on the preliminary documentation shared by NRDA during meeting in Delhi. It has been agreed that the draft

supplementary EA document will be provided for review and clearance by the Bank by 30th November 2013. Currently, the performance of this activity is rated as satisfactory.

- 31. *Hubli Dharwad*: Safety during construction –for vehicles and other road users, as well as workers, remains a very serious concern with roadworks in the Hubli-Dharwad BRTS development. This issue has been flagged for some time now. If identified remedial actions are not implemented beginning immediately and sequentially as per the timelines agreed, the current **moderately satisfactory rating on environmental safeguards will have to be downgraded**. Actions agreed along with other details are provided in Annex 6.
- 32. This will be despite very substantial progress achieved on plantation with 7800 saplings out of 8000 planned under the Green BRTS initiative already done for 2013. Initial monitoring by HDBRTS Company staff also points to good survival rates. Key decisions need to be taken for the plantation during rainy season of 2014 locations to be identified with HDMC, protection measures and their funding, if sites are not as protected as current ones, land for plantation to compensate for the trees identified for cutting following JMC survey.
- 33. Early confirmation is also required on how the reduction of volume in the Rayapur tank will be handled based on ongoing discussions with the Minor Irrigation department, since the Navalur lake has been suggested for restoring volume, while remaining area around the Rayapur tank may be developed as an urban green space. As already agreed previously, HDBRTS Company is urged to start working on the EA addendum including such changes, options analysis currently under discussion including location specific design changes, and revision to the management plans in light of outcome of these discussions and consultations. It has been agreed that the draft EA documentation will be shared with the Bank and PMC simultaneously by December 7, 2013.
- 34. *Pimpri Chinchwad*: The performance on environmental safeguards for the PCMC project is currently retained as moderately satisfactory (see details in Annex 2A). The mission noted that PCMC has taken action to address the issues raised in a complaint received by the Bank regarding restriction of and safety around access to one of the local colonies between Empire Estate and the Pavana river. A temporary road has been provided and the construction site has been barricaded to ensure safe passage for the colony residents. PCMC has been trying to contact the complainant since the completion of the installation of these measures, which the mission suggested should be done quickly and the issue confirmed to be addressed adequately.
- About 3 months ago, PCMC and the contractor for Empire Estate flyover carried out two 35. consultations with the residents of this colony to apprise them of the way forward as construction picks up speed. The mission was pleased to note that the consultations that were held in the community hall of Empire Estate complex were quite useful with attendance of the local residents, and elected representatives participating in the sessions. In addition to computer presentations, site demonstrations have also been held to facilitate understanding at the local level about the actual method and potential impacts as work progresses. The mission urged PCMC to continue such outreach efforts during the entire project implementation period so that local citizens are always aware of the issues that affect them such as safety. In corridor 3, at the PCMC school along the corridor in Wakad, the mission noted that the affected classrooms have been shifted further away from the road in another PCMC building which was previously used as a dispensary. Now the remaining 7 classes and hall also have been provided an entry from a road other than the corridor to enhance safety of students following project completion. The mission requested PCMC to ensure that the construction of the new school building further 50-60m inside the village be completed in timely manner to eliminate any residual impacts.

- 36. The mission noted that the contractor for Empire Estate flyover needs to improve environmental and safety management at the sites where work is in progress as well as their main camp close to Auto Cluster. In particular, it has been agreed that the constriction of the channel of the Pavana river would be reduced to the minimum possible, by removal of all material in the river bed beyond 2m of the pier since elaborate measures are no longer required. It was also agreed that the storage of material at the site will also be improved to prevent unsafe conditions for laborers in the camp.
- 37. On roadside plantation and issue of the total number as avenue plantation, the discussions focused on confirming that the changes made to the cross section in December 2011 are reflected in the EMP. It has been agreed that a supplementary document will be prepared detailing the changes to the plantation plan and submitted to the tree authority and disclosed on PCMC website by 31st December 2013. It will also be shared with the Bank as part of the QPR.
- 38. The mission also visited the Transit colony where it met with the local residents who raised the issue of inadequate drainage of wastewater and delays in removal of solid waste generated in the colony. The mission discussed with the PCMC engineers on site and it was agreed that these issues would be taken care of in close coordination with their SRA department. The mission also suggested that to avoid such situation at the Resettlement colony where these people will be moving shortly, in case there is a delay in providing the environmental services, short community environmental management plans should be prepared and implemented. This would be followed up during the next mission.
- 39. **Social Management**: The Mission visited Pimpri-Chinchwad and Hubli- Dharwad and held discussions with the concerned officials and also undertook field visits.

## Pimpri-Chinchwad BRTS

- 40. Land acquisition and resettlement impacts. The total land acquisition involved in the two BRT sections is 59 hectares, which was started in 2007-08. The progress to date is 51 hectares i.e. 86%. The acquisition of remaining land is suffered to due to court cases, lack of coordination with land acquisition department and lack of updated ownership records. The details of payment of compensation is also not available to assess how many of the affected land owners have received compensation so far. Based on the review, it is now assessed that the remaining land acquisition will be stretched up to March, 2014, which may affect significantly the construction of remaining works where land is not available to be handed over to the contractors. The road length that is yet to be handing over to the contractor stood at 2.95 Kms out of total length of 18.53 Kms in both the BRT corridors (15.92%) and the road length to be handed over in Bank financed sections stood at 21% of 2.52 Kms. The delay in handing over of these stretches is more than 3 years in most of the cases.
- 41. The allotment of houses to both who have opted for EWS houses and those residing in transit houses is also considerably delayed, even though the alternative houses are ready for allotment, the statutory clearances such as "consent to operate" and "occupation certificates" are received for 1008 EWS houses. The consent to operate for other schemes where the people from transit will be shifted is pending and according to PCMC it is now expected by first week of December, since most of the process is now completed. The mission expressed serious concerns over the delay of shifting of those who are staying in transit camps. These people are now staying for about 3 years against the originally envisaged period of 18 months. In view of the non-compliances related to allotment of alternative of houses to those who are already displaced and inordinate delay in shifting of those living in transit houses, the social safeguard rating is downgraded to "Moderately Unsatisfactory" and this will be revisited, in January, 2014, after

assessing the allotment of alternative houses by end of December, 2013, as assured by PCMC during the mission. The details are provided in **Annex 2-A.** 

#### **Hubli-Dharwad BRTS**

- 42. The magnitude of land acquisition in this proposed BRT is now revised to 70 acres including 14 acres of Government land and will affect about 1500 structures including 17religious structures as a result of joint verification.
- 43. Since last supervision mission in June and August, 2013, the key activities completed includes: (i) substantial completion of Joint verification of land acquisition impacts; (ii) structure valuation for 3 out of 10 villages/Towns; (iii) verification of affected PAPs to determine the impact category and changes in the affected families; (iv)initiation of consent award negotiations for 3 out of 10 villages/Towns; (iv) issue of identity cards to about 30 non-title holders; (v) orientation program for income generation activities to squatter families; (vi) continuing consultations with affected people and leaders of the affected religious structures; and, (vii) commencement of consultants for concurrent monitoring of RAP implementation. Notwithstanding the above progress, the project is also encountering difficulties and challenges such as: (i) impacts due to non-handing over land by owners to HDMC to comply the layout approval conditions; (ii) resistance from the Villagers at Navalur due to intended physical displacements; (iii) tough negotiations on compensation rates; (iv) resistance from some of the religious structure owners to avoid impact to their structures; and, (v) Resistance from the residents of Dharwad to make modifications in the designs to avoid impacts to commercial and religious structures.
- 44. The revised time frame envisaged for completion of land acquisition is February, 2014, which is 10 monthly behind the RAP time table of April, 2013. In addition, there is considerable delay in payment of R&R assistance to those who are already displaced 7 petty shopkeepers. These shopkeepers were given identity cards and the R&R assistance is expected to be paid shortly. Due to this minor noncompliance issue, the overall safeguard compliance in HDBRTS, is rated as "Moderately Satisfactory". The details of social safeguards impacts and agreed dated action plan is provided in Annex 6.

## VIII. Procurement, Expenditures and Disbursement Plans

- 45. **Procurement:** Mission had in the MTR Mission requested for updating for all procurement plan of the cities and of MoUD including reflecting the revised thresholds for prior review. Mission will carry out exclusive contract review meetings involving all stakeholders during future missions and requested for list of contracts (separate for Works, goods and consultancies) with the following information by end August 2013:
  - 1) Package No 2) Description 3) Contract No & Date and WBR no 4) Name of the contractor 5) Value of Contract 6) scheduled date of completion, actual/anticipated 7) Progress as on date (updated for each mission) 8) Reasons for delays
- 46. The updated procurement plan of the cities and of MoUD reflecting the status at MTR is pending since July 2013. The information requested for holding contract review meetings involving all stakeholders as requested at MTR is yet to be submitted. Inspite of upward revisions of the prior review threshold, the documents continued to be submitted causing considerable burden on the Bank. The Bank expressed disappointment with the continuing delays in completing actions to help expedite the Project and improve procurement function. Continued non updating the Procurement Plan violates legal requirement of the loan

47. While Bank had requested in every past mission for a proactive system involving MOUD, Consultant and the cities for quick turnaround of procurement issues, the quality of submissions, even after considerable delay resulting from internal review, continue to be poor and tentative.

If the above pending actions are not rectified by January 15, 2014, the procurement rating maybe downgraded.

Project Rating: Procurement			
Pimpri	MS		
Naya Raipur	MS		
Hubli-Dharwad	MS		
Mysore	MS		
Indore	MS		
PMU-MoUD	MS		
Overall Project	MS		

48. **Financial Management**: The financial management arrangements of this project have been reviewed during the mission. The implementing agencies are adequately staffed and are maintaining financial records for the expenditures incurred. They are also regular in submission of interim financial reports and audit reports to the Bank. There is an audit objection from the Maharashtra AG and they have held the amount of Rs. 21.1 cr under objection under IBRD 7818. PCMC will need to provide necessary explanations to ensure that this expenditure is regularized and recertified by the AG no later than January 31, 2014. Both HDBRTS and NRDA have sought an advance of US\$ 1 million following award of their major works contract. The budget process is now instituted by the implementing agencies but the mission team has noted that the financial estimates need to be aligned with the Procurement Plan (significant gap exists between budget estimates and actual expenditures) and needs improvement (refer Annex). Based on the discussions and the findings during the mission, the FM rating is retained as **Moderately Satisfactory**. The detailed FM status and actions agreed are provided in **Annex 7**.

Project rating: Financial Management			
Pimpri	MS		
Naya Raipur	MS		
Hubli	MS		
Mysore	S		
Indore	MS		
PMU – MoUD	MS		
Overall Project	MS		

## IX. Project Management

49. *Project Management:* The Mission was concerned to note that the PMU was spending an inordinate amount of time in following up from within MoUD on various payments including their operating expenses as well as Consultant dues under Component IB. This has obviously detracted from their Project monitoring and coordination function. The matter was raised in the Steering Committee Meeting held on 25 November, 2013, and a resolution is expected on the matter.

- 50. Secondly, with the consultants for Component IB activities coming on board and nomination of officials to LUTP programs 3-4 times in year the load on the slimly staffed PMU has grown drastically. The Mission strongly advised the PMU to hire additional staff to support them in this additional work. The Mission understands that the hiring of additional resources has been approved and the process shall be initiated shortly. In addition, MoUD may consider hiring a Panel of Experts, both international and Indian to help review the outputs being generated and ensure quality control.
- 51. The Mission was informed that the contract of the Project Management Consultant (PMC) is due to expire in February 2014 and with the extension in the Project Closing date to November 2015, the Ministry proposes to hire a new PMC for the balance period. Bringing a completely new consultant on board may create problems as they would take a minimum of six to eight months to come on board. However, in case MoUD prefers that approach, it would be important to make sure that there is no gap between the two consultants and in fact a suitable period of overlap is provided for.
- 52. Allocation of Unallocated GEF Grant of \$1.9mn to Mysore PBS. The SUTP Steering Committee had approved the induction of Mysore the city for a Public Bike Sharing Project and the allocation of the uncommitted grant of \$1.9 mn. The second draft of the DPR for the project was discussed in June 2013, which is broadly in good shape. The FM, Procurement and implementation arrangements are still pending finalization. DULT is concerned about the two year window of funding available with the Project and will revert with an indication of their interest no later than December 15, 2013. In case these funds will not be used for the Mysore PBS the Mission proposes to reallocate the amount among the existing cities based on their requirements to ensure their full utilization. Some cities, particularly Mysore and Hubli-Dharwad would benefit from additional funds, and others have also been advised to send in their requests at the earliest.
- 53. Change in Disbursement Ratio for GEF funds for Pimpri Chinchwad. As identified in the MTR Mission, the disbursement ratio for Pimpri Chinchwad GEF grant technical assistance activities will require modification as there was an error in computing it and also PCMC has initiated some Project related TAs through their own funds, approximately Rs. 31.25 million. After provisioning for these in the counterpart share, the disbursement ratio is expected to increase to about 90%.

# X. Next Mission for Bank's Implementation support

54. The next mission is proposed to take place between 10-21 February 2014.

#### Annex 1

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

# **List of Officials Met**

- 1. Mr. S. K. Lohia. Joint Secretary (UT), MoUD
- 2. Mr. I. C. Sharma, National Project Manager, SUTP Project Management Unit, MoUD
- 3. Ms. Rana Amani, Deputy Project Manager, SUTP PMU, MoUD
- 4. Ms. Aparna Bhatia, Director (MI), Department of Economic Affairs (DEA), MoF
- 5. Dr. Shrikar Pardeshi, Commissioner, Pimpri Chinchwad Municipal Corporation
- 6. Mr. Rajni Patil, Joint City Engineer, Pimpri Chinchwad Municipal Corporation
- 7. Mr. Shrikant Savane, Executive Engineer, Pimpri Chinchwad Municipal Corporation
- 8. Mr. Manjunatha Prasad, Managing Director, KSRTC
- 9. Mr. Mallikarjuna, CGM, KSRTC
- 10. Mr. S. S. Bajaj, Vice-Chairman, NRDA
- 11. Mr. L.K. Panigrahi, Chief Project Manager, NRDA
- 12. Mr. Sandeep Soni, CEO, AICTSL
- 13. Mr. Rahul Shrotiya, Manager, AICTSL
- 14. Ms. V. Manjula, Commissioner, Directorate of Urban Land Transport, Govt. of Karnataka
- 15. Mr. C. M. Noormansoor, Managing Director BRTS
- 16. Mr. Sudesh Kumar, Team Leader, Project Management Consultants, Mott MacDonald Pvt. Ltd.
- 17. Mr. Amit Kumar, Transport Planner, Project Management Consultants, Mott MacDonald

Annex 2

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

# Pimpri-Chinchwad

1. A World Bank Mission visited Pimpri-Chinchwad Municipal Corporation (PCMC) on 18-19 November, 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 the PMU, the PMC, and ITDP which is providing assistance with the BRT Project. On November 19, a meeting was held with PMPML, including Dr. Pravin Ashtikar, Joint Managing Director; Ms. Mayura Shindekar, CEO; and some of their staff in order to discuss the service plans proposed for BRT Corridors 1 and 2.

## **Proposed BRT Program in Pimpri-Chinchwad:**

- 2. The following four BRT corridors are being established at this stage:
  - (1) Old NH-4 (Mumbai-Pune road),
  - (2) Aundh-Rawet road,
  - (3) Nashik Phata to Wakad road,
  - (4) Kalewadi to Dehu-Alandi road,
- 3. The first two corridors were sanctioned initially by JnNURM, and road construction has been completed since some time. However, stations and BRT separators are yet to be completed. It is currently estimated that BRT operations would start in April 2014 on the Aundh-Rawet Road, and in May 2014 on the old NH-4.

### **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 below presents the overall status of the 3 contracts in this corridor. Overall progress in this corridor is about 90% in financial terms. The exclusive BRT Corridor cannot be fully operational because of non-availability of land in a few stretches.
- 5. **Interchange at Nashik Phata**: Progress of this contract is satisfactory and it is now substantially complete. PCMC will be handing over land for construction of Loop, however, the handover for land for part of Ramp3 and 4 is likely to take another 3-4 months time. The Contractor would require about 6 months following handover and so PCMC proposes to extend the contract completion date to August 2014. PCMC was advised to expedite the EoT and also submit for Bank approval.
- 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. PCMC informed that it is contemplating to award these works through open invitation of bids. The Mission advised PCMC to use available Bank funds to procure the tender.

Contract Pacakge on Corridor 3 & 4	Contract Value (Rs. Crore)	Revised Contract Value as of June 2013	Expenditure as of June-2013 (Rs. Crore)	Expenditure as of Oct-2013 (Rs. Crore)	Financial Progress on revised contract value (%)
BRTS Corridor No 3 (Nashik Phata to Wakad )					
3-1 Nashik Phata Grade Separator	98.81	123.13	100.57	119.11	97%
3-2 –Nashik Phata to Kasptewasti	57.11	71.39	51.69	53.19	75%
3-3 -Kasptewasti to Wakad	28.87	36.09	41.17	45.31	126%
BRTS Corridor No 4 (Kale wadi to De hu Alandi Road)					
4-1 –Kalewadi Phata to Chinchwadgaon bridge Phata	24.10	28.92	24.20	27.03	93%
4-2 – Chinchwadgaon bridge Phata to Pawana River	19.88	23.86	0.99	0.99	4%
4-3 Empire Estate Grade Separator	99.42	125.01	28.92	34.43	28%
4-4 –Pawana River to KSB Chowk	37.29	43.00	1.86	6.68	16%
4-5 –KSB Chowk to Dehu Alandi Road	37.06	44.48	31.50	35.38	80%
Total	402.54	495.88	280.90	322.12	

- 7. **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 above presents the overall status of the 5 contracts in this corridor. Overall physical progress in this corridor is about 35% in financial terms. The exclusive BRT Corridor cannot be fully operational because of non-availability of land in a few stretches.
- 8. **Empire Estate Grade Separator**: Progress of this contract remains unsatisfactory. Only 28% progress has been made thus far. 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).
- 9. The Mission noted with concern that from progress in casting segments of 6 per week in June 2013, proposed to be raised to 12-14 per week, it had actually dropped to 3 per week in October 2013. It was explained that owing to delays in completing the service road the reduction in Casting of Superstructure segments (26-21 per month has come down to 14-12) is because of no space available for stacking new Segments.

- 10. The 2nd Gantry, which was supposed to be commissioned by end-August 2013, has been ready just now. This delay may have been caused partially by the delay in completing the Service Roads by the Contract IV Contractor and filling of a Pond in Part 4. The Gantry is however now available and started erecting the Segments. As the Segments are erected creating space for stacking, new Segments can be cast. The contractor projected that they would be able to reach a level of about 60 segments by December.
- 11. Gammon cannot proceed towards P10 (completed up to P9) because of the presence of HT Cables (relocation of HT Cables was likely to be completed by end-Nov 2013). Additional problem has arisen because of a local resident's objection in relocating the HT Cables. Gammon may consider to dismantle its 1st Gantry (now at P9) and re-erect at P11 (will take a month), so that they can proceed further, in case HT Cables are not relocated at P10 early.
- 12. The matter of clearance of Designs and Drawings by the Railways has not been resolved. Although Gammon had agreed to pay to the Railways 'under protest', they have not paid instead, trying to expedite the Dispute Adjudication process. The verdict of the Dispute Adjudication Board (DAB) is not out yet though expected shortly.
- 13. The Contractor felt that they could still complete within the extended Time of 31 August 2014, provided land was handed over in a timely manner. The Mission is informed that the Contractor's
- 14. **BRT Stations**: The long awaited construction of BRT stations for Corridor 1 and 2 is about to begin. As indicated further below, it has now been agreed that express bus services will operate along Corridor 1. <u>The Mission therefore recommends</u> that the necessary addition of a third bay to the express bus stations (at least two) be included in the designs before construction begins.
  - Based on recent tests of Pune's new BRT corridor, it was suggested that station platforms be equipped with horizontal rollers as had been pioneered in the Ahmedabad and Indore systems, in order ease the docking of buses. <u>The Mission recommends</u> that similar rollers be incorporated in the BRT stations of Pimpri-Chinchwad.
  - The Mission was informed that PCMC had received approval for issuing tenders for Corridor 3 and 4 BRT stations as well and would be proceeding accordingly. It was agreed that the contractors shall be on board by Jan 31.
- 15. **BRT Terminals**: PCMC advised that the contracting of BRT terminals had been delayed. This is unfortunate as it is not clear how BRT services can start within the next half year, without those terminals being in place. The Mission expressed deep concern over the continuing delays in concluding the matter. Based on information collected during the current and previous visits, the situation is understood to be as follows:
  - For <u>Nigdi</u>, tenders could be issued once approval is obtained from the State Government; The area falls under the Red Zone where there are building and height restrictions. The Mission advised PCMC to find an alternate solution and /or consider building temporary structures for the Terminal as an interim solution. <u>The Mission recommends</u> that the tender documents be issued as a matter of urgency, based on the current design and no later than Dec 31.
  - 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.

- Designs have been prepared for a terminal at <u>Ravet</u>. However, PMPML informed that there would be no feeder services to Ravet in other words, building a terminal at this location does not appear urgent at this time. However, the Mission recommends that proper facilities be provided at Ravet for BRT buses to turn around.
- The layout of the facility at <u>Aundh</u> 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. In August 2013, 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 for bus parking and depot facilities for PMPML.
- The need for feeder services at the *end points of Corridors (3) and (4)* is yet to be established by the study conducted by M/s Aakar Abhinav. This should not hold up the planning for possible terminals at these locations. As a minimum, proper turn-around facilities should be established for the BRT buses.
- 16. **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 August 2013 mission accompanied by PCMC staff carried out a field visit of that zone. Its observations were summarized in a Technical Note which, regrettably, was not shared with PCMC's technical staff. The August 2013 observations are thus repeated below:
  - 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.
  - 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.
  - 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.
  - 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.
  - It might be complemented by a "normal" BRT station near the Bhosari intersection to serve the high passenger demand of the surrounding commercial area.
  - Another option to place a BRT trunk-feeder terminal would be on a large free lot near "Petrol Pump", about half-way between Nashik Phata and Bhosari. A disadvantage of that option would be that the BRT routes would not serve the high-demand Bhosari zone.
  - A new median busway might be placed underneath the flyover for the entire length south of the BRT terminal. Between Nashik Phata and the beginning of the busway, BRT buses would operate in mixed traffic.
  - The mission recommends that PCMC, as a matter of urgency and possibly with the assistance of its consultants, carry out (a) a review of the various aspects described above and define a comprehensive transport improvement 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-December 2013 conceptual layouts at both possible terminal locations (petrol pump and Natyagruha) should be prepared for consideration by PCMC management.
- 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.
- 17. *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 PMPML's 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.
- 18. 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 expected to be tabled in the next review meeting. It is now clear that the Corridor 1 and 2 BRT will be launched without the ITMS. For Corridor 3 and 4 there maybe a possibility for ensuring installation prior to BRT launch.
- 19. **Traffic Safety Audit:** PCMC presented the preliminary results of the study carried out 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. Special attention was also given to the slip ramps between the high-speed expressway and the service roads (the latter including the segregated busway and mixed-traffic lanes).
- 20. The situation at the 20 slip ramps (between the express lanes and the service road, crossing the future busway) was analyzed in some depth; as one recommendation, the traffic safety consultant proposes to close five ramps where the share of diverging / merging traffic is less than 20%, a proposal with which the mission concurs. The audit also examined several options on how to manage safely the movement of vehicles between the slip ramps and the service road, each crossing the BRT busway at a fairly steep angle; commendably, it also prepared a visual simulation of those movements. The analysis demonstrates the challenge of combining the slip ramp movement with the crossing of the busway. In the mission's view, all options considered would generate hazardous vehicular conflicts. The Mission recommends to consider and test a different type of option, under which vehicles would enter the busway before (or after) passing via the slip ramp, and weave across the busway over a distance of about 40-50 meters. This would imply that the opening in the busway segregation would be about 100 meters long and, possibly, compromise the free flow of buses in the busway. However, if such a solution can be shown to be safer traffic-wise, the disadvantage of reduced bus speeds would be more than offset by a reduction in traffic hazards.

- 21. On a different aspect, the safety audit did not consider the possibility of *express BRT buses to use selected slip ramps* conceivably this may call for a modification of the slip-ramp geometrics. The Mission repeats its previous recommendation that the study should examine the safety aspects of express buses running between the busway and the central expressway, at selected locations, and make any recommendations that may be necessary.
- 22. The safety audit carried out an extensive analysis of *intersections at five road underpasses* (passing underneath the expressway lanes) where the BRT busway will cross the paths of vehicles moving to/from the underpass, thereby creating a potentially unsafe situation. The mission agrees with the Audit's general proposal that these intersections should be controlled by traffic signals. The Mission, however, noted that PCMC had not acted on this recommendation and the procurement of Traffic Signals was not identified as a key action for delivery of Corridor 1. It was agreed that PCMC would use the Safety Audit Consultants to prepare the designs before initiating the tender for the same.
- 23. Further, the Mission questions the proposal of building the busway segregation all the way up to the intersection; right-turning vehicles would thus have to cross BRT buses in a separate signal phase which is inefficient and would cause additional delays to all traffic, including BRT buses. The Mission recommends that an alternative solution by examined, under which the busway segregation is built only up to about 40-50 meters from the intersection; this would permit right-turning vehicles to use the busway lane. The traffic counts indicate a maximum flow of 7 to 11 right-turning vehicles per minute which is unlikely to substantially slow down the BRT flow the time benefit of having 2-phase rather than 3-phase signal control is expected to more than outweigh the effects of mixed traffic in the 40-50 m stretch before the intersection. (In London, this type of sharing bus lanes with turning vehicles was successfully introduced in the 1970s). This type of solution also implies that BRT bus stations should be placed on the far side of the intersection, or at least 50 meters from the near side.
- 24. The Audit also prepared schematic layouts and traffic counts for *eight major intersections*, but produced only general criteria for their geometric layout and signal control. For this to be useful, specific geometric layouts should be developed to scale, as well as signal locations and phasing, and pedestrian facilities. Although it is not known whether this is outside the work scope of the Traffic Safety Audit, the Mission recommends that proper traffic engineering and safety designs be prepared as a matter of urgency for the major intersections where the BRT busway is proposed to pass.
- 25. The Traffic Safety Audit proposes several *interesting lighting solutions*, in particular the impressive "futurlux" crosswalks. <u>The Mission recommends</u> that the final report identify the crossings where these are to be placed, and present the quantified technical information that PCMC will need to procure and install this equipment.
- 26. With regard to pedestrian facilities, the Audit should give greater attention to the placement of *refuge islands*, an element that seems to be surprisingly lacking in the interim presentation. For example, where crosswalks are planned across the BRT busway, it seems obvious that the physical segregation of the busway from mixed traffic should be widened to 50-100 cm so pedestrians get an adequate refuge space rather than having to stand on the 20 cm wide strip of the basic segregation. The Mission recommends that a careful plan of pedestrian refuges be devised (urgently, considering that the busway segregation is to be built soon).
- 27. The Audit proposes the use of *tabletop pedestrian crossings*, an element that is certainly useful when crossing mixed traffic lanes. However, tabletop crossings should not extend across the busway as BRT bus drivers will receive training to slow down at dangerous spots and, in

particular, as it would detract from BRT quality if passengers are exposed to such bumps at regular intervals. <u>The Mission recommends</u> that no table-top crossings, nor speed bumps or rumble strips, be placed anywhere across the BRT busway.

- 28. The Audit appears to concentrate its efforts primarily on four-wheeled vehicles; for example, the visual simulations do not include a single *two-wheeler*. The Mission repeats its previous recommendation that the Audit include 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 physical measures are a key element in reducing accident hazards.
- 29. **BRT Service Plan for Corridors 1 & 2:** In early August 2013, 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 August mission, including the need to know more clearly the expected bus volumes on each section of the BRT. On October 16, PMPML sent a revised service plan to PCMC, and the Bank provided its comments on November 7. The revised plan had two options (with 14 and 8 bus routes, respectively, on Corridor 1, and with 8 and 6 bus routes, respectively, on Corridor 2). PMPML agreed with the Mission, that the lower option would be selected for further planning work. To serve an estimated peak directional passenger demand of 5,400 passengers per hour on Corridor 1 (estimate for 2014), standard-size buses would run at an average headway of 47 seconds. This exceeds the capacity of a one-lane segregated busway, and it was therefore agreed with PMPML that express services would be required from the beginning of BRT operations. The mission recommends that PMPML should modify its service plan for Corridor 1, allowing for the operation of express buses about every 2 minutes along the central lanes of the old NH4.
- 30. It was agreed that the revised Service Plans for Corridor 1 and 2 would be submitted to the Bank by December 15. The Service plan would include (i) express services; (ii) infrastructure requirements on the corridor on account of the express services i.e. 3 bay stations at 3 locations, merge in merge outs etc, (iii) Terminal requirements, (iv) Proposal for implementing off board ticketing at BRT stations with Conductors, (v) contracting terms with operators for the BRT, (vi) cleaning contracts for Buses.
- 31. **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 therefore transport demand data (including origins and destination) are needed. PCMC thus contracted M/s Aakar Abhinav, 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.
- 32. On November 18, the consultants presented the findings of the recently completed surveys and, on that basis, highlighted the "need" for several road improvements. The Mission commented that such improvements could not be identified merely based on field surveys, but that results of a transport model had to be known and other criteria (economic, environmental, social etc) had to be considered before any major improvements could be suggested. Most of all, the Mission stressed that this study aims to establish BRT service plans, an important task that should not be watered down by addressing road improvement needs. (The consultants also

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referred to their plan of carrying out economic IRR calculations – quite inappropriate for this type of analysis and not specified in the study TOR).

- 33. The surveys are needed to refine the Pune Metro model (or other demand forecast prepared in the past see paragraph 37), so it can be used for testing BRT service plans in northern Pimpri-Chinchwad. The consultants advised that IIT would deliver the model by December, and that the evaluation of BRT service plans would be completed one month thereafter. The Mission recommends that the relevant reports be shared with the Bank for its information by 1 February 2014.
- 34. Other Studies, Technical Assistance (TA) and Capacity Building: The mission discussed the status of the various studies under implementation, financed under the GEF grant.
  - (a) Parking Policy and Master Plan: The contract was signed with UMTC in October, and the study has commenced in November 2013. The mission recommends that the Inception Report be shared with the PMU and the Bank by Dec 15.
  - (b) BRT Passenger Access: The contract was signed with MVA Systra in October. The consultants made an interesting presentation on the concepts of accessible transport. The Mission recommended that the study, in addition to establishing a policy on BRT access, should elaborate a specific plan on access improvements in a pilot zone, such as the area near Chinchwad BRT station, or selected areas along the BRT Corridor 3. Inception Report should be submitted by Dec 15
  - (c) Promotion & Outreach Plan for BRT: The contract is being finalized with the selected consultants, IBI Group. Inception report submission by Dec 21
  - (d) *Monitoring and Evaluation*: The M&E consultants, IBI Group, made a brief presentation on the collection of base-year data. It was agreed that they make a presentation on the Report in Delhi following the Mission.
  - (e) *TOD Policy*: It was previously agreed that Detailed Development Plans be developed as pilots as part of the Policy. PCMC agreed to share the ToRs for the activity by December 15.
- 35. **BRT Advisor:** Previous missions had 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 and initial operation of the BRT. PCMC has been pursuing this matter with CEPT, Ahmedabad, but no specific agreement has yet been reached. In mid-November, contacts were established with an independent consultant who has many years of experience in the design and operation of BRTs, primarily in the State of Gujarat. The mission hopes that the conversations between PCMC and the consultant are successful, and that the steps to contract him are quickly achieved. The costs of this consultancy would be eligible for payment under the GEF grant. The Mission recommends that PCMC send the TOR and other contract arrangements to the PMU and the Bank as soon as possible, so he can commence is work in December.

## **Project Management**

36. 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 had been confirmed during the September 2012 mission that a BRT Cell (or Special Purpose Unit) should be established within PMPML to perform these tasks. The Mission was pleased to learn that the establishment of a BRT cell was approved earlier this year, and, in particular, that a senior officer (Ms. Mayura Shindekar) has been assigned to head up that Unit. PMPML and PCMC staff have also been selected to work in the Unit. The mission

<u>reiterated its previous advice</u> 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.

## **Environment Management**

- 37. In Pimpri Chinchwad, the mission visited the construction site for the interchanges at NH4 intersection on corridor 3 and 4 as well as some of the road sections. It also discussed the progress on plantation with the PCMC officials, where a complaint was received by the Bank in advance of the mission.
- 38. At the site for which the complaint was made, the mission observed that the entry to the residential complex had been isolated and that the construction area had been barricaded. A new road approach to the complex has been created until the service lanes that will be under the flyover are constructed. The mission did not observe any open or unsafe areas.
- 39. However, along the alignment, closer to the Pavana river, the mission noted that the construction level for the piers is now sufficiently above water and no continuous blockage of the water flow is required. It strongly recommended that the construction zone be limited to the minimum beyond the pier edge and the rest of the section of the river be cleared of all construction material so that the cross-section of flow resembles the pre-project situation as much as possible. It was agreed that this would be done and photographs of the site would be shared with the Bank by 30<sup>th</sup> November 2013.
- 40. In the contractor's camp, the mission observed that focus on increasing production of segments was creating potential hazards for workers due to unsafe storage of material. The mission advised that housekeeping around the entire site needs to be reviewed, and proper measures like isolation of waste/scrap, clear delineation of storage area boundaries, etc. need to be taken up as priority. It was also observed that the quarters for workers need to be improved to bring them in line with the agreed EMP measures. It has been agreed that PCMC would confirm this along with the work in the Pavana river by 30<sup>th</sup> November 2013.
- 41. The mission noted that PCMC and contractor team had proactively approached the residents in the Empire Estate complex and explained to them the process of construction in that area. The mission was informed that the local elected representatives and residents were present in those presentations and had actively participated in the deliberations held in the Empire Estate Complex. The mission commended this effort and suggested that the PCMC and contractor should continue to engage with the local population in such constructive manner so that there is little chance of miscommunication and concerns raised can be addressed before they become contentious issues.
- 42. The mission discussed the plantation progress and agreed that the supplementary plantation plan, providing information regarding the changes made to the one in the EMP should be shared with the Bank. It was agreed that this would be done by 31<sup>st</sup> December 2013 and same would be uploaded in the PCMC webpage where the EIA is uploaded.
- 43. Along corridor 3, at Wakad village, a PCMC school is proposed to be relocated from the edge of the project corridor which will have higher noise and pollution levels once it goes into operation. The mission was informed that the new site, about 50-60m away from the corridor towards the village is currently under litigation though construction had begun for a larger school there. In the interim, a part of the building has been removed, and the classes have been shifted to another PCMC building inside the village. The entry to the school has also been modified to

ensure that no children are directly moving on to the project corridor. The mission requested PCMC to follow up on this and keep the Bank informed regarding the progress on the shifting of the remaining classes also.

44. The mission visited the resettlement colony close to the Nashik Phata flyover, and noted that water supply and electricity were being provided to the temporary residents. However, some of the lanes had problem of improper drainage with pools being formed in front of the houses, and removal of solid waste which residents complained caused the menace of rats. The mission discussed with PCMC officials and advised that SRA department and solid waste department need to coordinate quickly and effectively to ensure that there are no problems on this account. The mission also asked the PCMC to ensure that the provision of all environmental services – water supply, sewerage, solid waste removal, are provided and running in the complexes where these people are to move. In order to ensure that their living in proximity did not exacerbate the problems, it suggested that concise community environmental management plan be prepared and their implementation shared with the residents as they move from temporary to permanent houses. A decision in this regard should be conveyed to the Bank in OPR for December 2013.

## **Key Agreed Actions:**

- Close monitoring of the Empire Estate Contractor work progress Continuous
- Submit Monthly Progress Report on Empire Estate Contract
- Submit updated BRT Implementation Schedules for Corridors 1-4 Dec 7
- Submit Request for change in Disbursement Percentage for GEF Funds to MoUD/ DEA
   Dec 7
- Submit Inception Report for BRT Access & Parking Policy Study / State of the Art Report – Dec 15/ Jan 31
- Submission of Inception Report for Promotion & Outreach program consultants Dec 31
- Presentation of Baseline Survey Report by Monitoring & Evaluation Consultants Dec
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- Finalise modalities of hiring BRT Advisor Dec 7
- Submit revised Action Plan for Safety improvement on Corr 1 Dec 31
- Submit Draft ToR and EoI for ToD Study Dec 15
- Submit Revised Service Plan for Corr 1 and 2 Dec 15
- Submit Service Plan Report for Corr 3 and 4 Feb 1
- Initiate Tendering process for ITS / contract award– Dec 15/ Mar 31
- Finalize contract award for BRT Stations for Corr 3 and 4 Jan 1
- Finalise Detailed Designs for interim Terminals on Corr 1 and 2/ Tenders issued Dec 15/ Dec 21
- Finalise Functional Designs for proposed permanent Terminals at Bhosari Dec 31
- Ensure removal of construction material from River Nov 30
- Improve Gammon camp site Nov 30
- Improve facilities in Transit camp for squattors Nov 30
- Substantial Completion of pending land acquisition Mar 31
- Resettlement of squatter families to new houses Dec 31
- Complete Verification of EWS applicants/ Allotment of alternative EWS houses Nov 30/ Dec 31
- Submit Remedial Action Plan for 60 displaced PAPs Immediate

## Annex 2-A Social Management

## **Pimpri-Chinchwad BRT**

45. Land acquisition Progress. The total land acquisition required for the two corridors (No 3 and 4) is about 60 hectares. Out of this, 86% has been acquired including those opted for TDR/FSI. The remaining land is not available due to pending land acquisition, transfer of MIDC and litigations due to court cases. It is learnt that payment of compensation is held up to large number of land owners due to want of ownership documents and other supporting documents. The details are not readily available. Based on the review, it is now expected to prolong land acquisition upto March, 2014, which will serious affected the works at little location where land is not available to the contractors. The mission also appraised about the retroactive provisions in the new land acquisition, where the process need to be restarted if the awards are not declared by the effective date of new Act and new rates should be applied in case compensation payments are not made to the people. The summary of land acquisition details and progress is presented below.

No	Land acquisition	Kalewadi-	Nashki Phat	Nasikphata-	Total	
	Impacts	Dehu-Alandi	Flyover	Wakad Road		
		Road				
		Land acqu	usition process			
1	Land acquisition (in Ha)	30.57	1.56	27.30	59.43 (100 %)	
		(100%)	(100.0%)	(100.0%)		
2	Land acquisition	24.57	1.08	25.84	51.49	
	completed	(80.37%)	(69.23%)	(94.65%)	(86.64%)	
	Compensation Payment					
3	No. of land owners as	NA	NA	NA	NA	
	per LA compensation					
	Award					
4	No of land owners	NA	NA	NA	NA	
	received compensation					

46. Entitlements to different Impact groups. The payment of R&R assistance, initiated in early 2013, has achieved a progress of 50-85 for different types of assistance. The details of payment of cash allowance as of October 31, 2013 are summarized below. It is now agreed that PCMC will issue a paper notice by giving a month to collect the R&R assistance to those who are not yet to collect the amounts. In addition to paper notice a final reminder will also be sent individually to bring a closure on these pending payments.

No	Type of assistance	Target	Progress	Remarks
1	Transportation allowance	282	187 (66.31%)	
2	Assistance for Vulnerable	76	53(69.74%)	
	Families			
3	Payment of subsistence allowance	68	35(51.47%)	
4	Subsistence allowance for Non-	72	5 (06.94%)	
	title holders			
5	Allotment of EWS Houses	257	00	
6	Allotment of alternative houses	144	00	Part of supplementary RAP
	to affected squatter families			
7	Payment of Vulnerability	93	79 (84.95%)	Part of supplementary RAP
	assistance to Squatter families			
8	Payment of additional	34	26 (76.47%)	Part of supplementary RAP
	subsistence allowance to			
	shopkeepers			
9	Payment of R&R assistance to	32	26 (81.12%)	Part of supplementary RAP
	affected shopkeepers			
10	MOUs with shopkeepers	32	26 (81.25%)	Shops will allotted as and
				when ready

47. Encumbrance Removal Plan. An updated encumbrance removal plan has been shared by PCMC with the mission. Since most of the remaining encumbrances are either related to court cases or land acquisition maters, the availability of remaining stretches will depend upon the outcome of court cases. As of now, 2.95 kms (16%) is not available to hand-over to the contractors in both corridor 3 and 4 due to various encumbrances. In case of World Bank financed packages, 538 meters out of 2680 meters is yet to be handed over. There is a delay of more than 3 years in handing over of these stretches to the contractors as per contract time schedules and this will have major cost and time implications (see below for details). The major reasons identified for this delay are delayed land acquisition, court cases and transfer of lands from other Government agencies. In case of MIDC land in Kalewadi-Dehu Alandi road, there is no agreement on the compensation for affected structures between PCMC and the affected people and as a result PCMC will approach the court for their direction, since the negotiations were held as per the court advice.

Status of Handover of Encumbrance-free stretches to contractors\*

No	Headings	Nasikphata-	Kalewadi-	Total	Remarks
		Wakad	Dehu-		
		Road	Alandi		
			Road		
1	Length of road under	8.09 Km	10.02 Kms	18.11 Kms	WB is financing 2.68
	BRT				Kms
2	Length of road handed	6.96 Kms	8.20 Kms	15.16 Kms	
	over to contractors	(86.00%)	(81.83%)	(83.71%)	
3	Length of road not	1.13 Kms	1.82 Kms	2.95 Kms	538 meters out of
	available for handing	(14.00%)	(18.16%)	(16.29%)	2680 meters (19%) is
	over to the contract due				not available in WB
	to encumbrances				financed packages

48. *NGO services*. The non-availability of NGO services to support PCMC in the implementation of RAP is seriously affecting the mobilization of PAPs for their shifting and assist them in preparing various documentation for availing the alternative houses. The mission

once again emphasized the need for such service since lot of activities on relocation of affected people is pending. The mission was informed that PCMC has decided not to engage the NGO services and will continue to engage their own staff for these activities. In the assessment of the mission, the NGO services will go long way in mobilization and engaging PAPs and prepare themselves for their resettlement. The mission once again advised PCMC to consider in engaging NGOS services to expedite the management of resettlement process.

- 49. Visit to the Transit Camp. The mission visited the transit camp where 144 displaced families are staying pending their permanent resettlement. These people are now staying in transit for about 3 years against the originally envisaged period of 18 months. The people mentioned that they have no issue with drinking water and electricity supply, however they are dissatisfied with solid water collection and drainage, which have recurring issues. The mission conveyed to PCMC to look into these issue and attend to ensure that basic amenities are available at the site. The people also mentioned that they are eager to move to the new houses since the temporary houses have outlived their life. While some people have difficulty in payment of upfront beneficiary contribution of Rs 10,000, others have expressed their willingness to pay and PCMC should initiate this process. PCMC has mentioned that they are exploring other options for beneficiary contribution, in case of those who cannot afford to pay the amount. PCMC mentioned that they are in advance stage of discussions with Bank of Maharashtra in tying up loan to these people to meet overall beneficiary contribution.
- 50. *EWS Housing*. As of now 257 are identified as eligible for EWS houses. However, lot of supporting documents and other formalities for availing loan need to be carried out and mission once again advised PCMC to pay attention for this aspect so that the houses can be allotted once the inauguration of houses is completed.
- 51. Displacement of people without allotment of houses. Following Court 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 in June, 2013. 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. During a separate visit undertaken by PMC in late October, 2013, it was observed that full documentation on this was not available. Only 40 out of 60 peoples figured in the eligible list of RAP. The status of remaining people is not known. Out of those 40 only 23 have applied for alternative EWS housing. The mission was informed that Director of Town and Country Planning has been asked to verify this. The suggested action plan to already 60 displaced and others who are required to be shifted was not prepared by PCMC as agreed and confirmed by PCMC during the last interim mission in August, 2013. The mission explained and provided guidance in preparing the action plan and asked them to submit at the earliest, which will become the basis for monitoring the actions to resettle the affected families.
- 52. Dated Action Plan. The mission discussed the following key target dates for the remaining activities.

No	Actions	Responsibility	Target Date	Remarks
1	Action plan to deal with those	PCMC	Immediate	Pending since Sept-15-2013
	who are already displaced 60			
	families and those who are yet			
	to be shifted			

2	Verification of affected PAPs	PCMC	30-Nov-13	Town and country Planning
	for offering EWS houses			Department of PCMC
3	Issue a notice in local	PCMC	10-Dec-13	Also send final individual
	newspaper for collection of			reminders
	remaining R&R assistance			
4	Resettlement of squatter	PCMC	31-Dec-13	Pending since September 2012
	families to new houses			
5	Allotment of alternative	PCMC	31-Dec-13	Pending since September, 2012
	houses to who have opted for			
	alternative EWS houses			
6	Substantial completion of	PCMC/District	31-Mar-14	Pending since June-13
	pending land acquisition	Administration		

Annex 3

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

#### Naya Raipur

1. A World Bank mission met with the Naya Raipur Development Authority (NRDA) officials on November 13, 2013, to discuss the implementation of the Naya Raipur component of the Sustainable Urban Transport Program (SUTP). The mission met with Mr. S. S. Bajaj, Vice-Chairman and ex-CEO, NRDA, Mr. L.K. Panigrahi, Chief Project Manager (SUTP), NRDA. Also present were representatives of PMU, PMC and consultants working with NRDA on various activities and EMBARO.

### Non-Motorized Transport (NMT)

- 2. **NMT Infrastructure**. The PIU informed the mission that the pre-bid meeting was held on October 1, 2013, without major queries raised by the bidders, and the bid submission date is set on December 3.
- 3. In addition to the basic plan of NMT facilities, the mission reiterated its earlier observation in regard to other aspects of NMT provision. With agreement recently reached between NRDA and the consultants on a small contract revision, these aspects can now be addressed and described in a report (due on June 27, 2013).
- 4. Access to Capital Complex: The consultant made a presentation on the design revision of the capital complex to improve NMT mobility. Revised design will be submitted by the end of November. There was considerable discussion about the proposed NMT-path connecting the Capital Complex with Block 27. The consultants advised that physical measures to prevent motorcycles from using that path were not feasible, and that enforcement would be required to keep this facility reserved for non-motorized transport. The meeting concluded that, as the deployment of guards at that path is most unlikely, it would be overwhelmed by motorized two-wheelers. In principle, the following options seem possible: (a) do not build the path, (b) build a path which would be largely used by motorcycles, and (c) build a mixed-traffic road at this location, with appropriate provision for NMT. The final version of the consultants' report will discuss the options and recommend the best solution, taking account of NRDA's preferences. This will be submitted by Dec 7.
- 5. NMT Connections to Residential Streets of Block 27: Previous missions had noted that a ditch separates the main arterial from the residential area of Block 27 which, in effect, would be accessible only from a few select locations. While this arrangement may have the positive effect of minimizing motorized traffic in narrow residential streets, it would be quite awkward for pedestrians who are much more sensitive to long detours than users of motorized vehicles and who would have to walk much longer to reach a bus stop. The NMT consultants will examine the possibility of providing more connections between the residential area and the main arterial; these would likely include short pedestrian bridges crossing the ditch at selected locations. The final report of the consultants will cover this aspect. This will be submitted by Dec 7.
- 6. General Footpath Standards: A concern raised by previous missions is the issue of providing pedestrian facilities along the many new roads that are being developed in Naya Raipur (other than those specifically covered in the NMT plan). Some roads have already been built with narrow sidewalks; many of these are used to place street light poles which are usually located right in the middle, thereby blocking the path for pedestrians who then have to walk on the carriageway. The mission repeats its previous recommendations that the NMT consultants

address this and similar issues and suggest a standard on how to appropriately design and manage sidewalks in Naya Raipur

## Bus Rapid Transit (BRT) Lite

- 7. Three BRT corridors are planned:
- Corridor 1: Naipur Railway Station NH6 Capitol Complex in Naya Raipur (24.7 km)
- Corridor 2: Kabir Nagar (Raipur) NH43 Capitol Complex in Naya Raipur (37.5 km)
- Corridor 3: On the main east-west axis of Naya Raipur, between NH43 and NH6 (17.8 km).
- 8. **BRT Infrastructure**. The contract for development of BRT Infrastructure including BRT stations, Depot and pick up point at Central Secretariat has been awarded on October 3, 2013. The contractor has not mobilized as yet as the bank guarantee submission is still pending. The mission advised the PIU to expedite the process and closely monitor the progress. It was agreed that the contract will be signed in the 4<sup>th</sup> week of November and the contractor to be mobilized by December 1, 2013.
- 9. **Bus Service Plan:** During the last mission the service plan aspect was deliberated upon in detail. The mission had recommended that NRDA should examine the various service plan options for the launch of Phase I of Naya Raipur BRT Lite. NRDA has shared the TOR and draft EoI for this study for review.
- 10. **BRT Pick-up point at Raipur Railway Station:** The layout which has been agreed with IR includes a platform for 3 BRT buses at the outer edge of the railway station plaza, between the existing garden and the avenue leading to Teleghani Naka Chowk. Downstream from the proposed BRT station was a narrow divider between the car park and the space reserved for city buses. After some discussion, it was agreed that the divider should be widened to about 4 meters so it could serve passengers waiting for and boarding city bus services (the proposed widening is yet to be confirmed by IR). It was also agreed that the divider would be extended to the edge of the existing garden, and that a clearly demarcated crosswalk (probably tabletop) would connect the BRT platform with the city platform and the railway station entrance. As per the next steps IR has sought a deposit from NRDA for the works involved. Considering the importance of the Pick-up point and amount of time the work will take, the mission requested the PIU to expedite the deposit and closely monitor the progress since this project might not be given a high priority by the Railways.
- 11. **Location of BRT stations in Naya Raipur:** At the ToD charette held in April, doubts were raised about the location of some BRT stations, the construction of which has already been tendered.
- 12. Several options were discussed to shift the BRT station serving the future Central Business District (CBD) to be closer to the station of the suburban railway considered along the western boundary of Naya Raipur. It was agreed that this issue should take account of the expected railway passenger demand and the timing when suburban rail services would start operating. In the meantime the BRT station serving the CBD should remain at the previously considered location.
- 13. It was also agreed that the proposed stations 07 ad 08 should be shifted northward to better serve the proposed new hospital and the nearby residential areas.

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14. In the first phase of the BRT, Station 03 on Naya Raipur's main boulevard would be somewhat isolated from the likely bus services. The question whether and when that station is built should be revisited once the BRT service plan is available.

NRDA should confirm that these improvements have been shared with the contractor.

- 15. Construction Supervision Consultancy: The PIU briefed the mission that it is in the process of finalising the draft contract for the construction supervision consultancy to increase the duration from 15 to 20 months. This is intended to cover the duration of both the construction contracts and will involve the same number of manmonths and therefore no change in the cost of the contract. The mission expressed concern at the long delay in finalizing the contract especially when the contractor for one package would begin mobilizing soon. NRDA proposed to submit the draft contract by November 22, 2013.
- 16. ITS contract: ITS PMC consultant delivered a presentation on different ITS components proposed for Naya Raipur along with their recommendation about technologies to implement ITS to the Mission. PIU has submitted the Project Concept Report outlining the technology options for different ITS systems which are envisaged for Naya Raipur (i.e. GPS based AVL System, PIS and Fare Collection System) along with tentative estimated cost of implementing these systems. Given the need for security enhancement and availability of various low cost options the Mission advised NRDA to also include Security Cameras in BRT stations and in Buses within the scope. Next step is to prepare and submit the DPR and RFP for System Integrator (SI). It was agreed that the DPR would be submitted by Nov 25 and draft RFP by December 2. It was also agreed that PIU will prepare a project plan to bring the SI consultant onboard.
- 17. The PIU informed the mission that it has requested the consultant to revise the timeline for delivery in the concept report. The mission recommended that the report has to base its recommendations on the past and ongoing experiences in ITS projects in Indore, Mysore, and other cities, especially the problems that have happened in these cities. Key features for the ITS component, such as future expandability and ease of maintenance, have to be incorporated.
- 18. **Rolling Stock**. NRDA informed the mission that it has been sanctioned buses under the JnNURM second phase for running the BRT Lite services.
- 19. **Project implementation schedule for the BRT**: With the PIU being fully functional and the first works contract being procured, the mission recommended the PIU developing a BRT implementation schedule, showing how and by when the BRT will come, which will give a lot of clarity to all the stakeholders. The mission noted the procurement for the BRT service planning exercise is underway with the draft TOR recently been sent to the bank for review. The PIU agreed to submit the schedule by 1<sup>st</sup> week of December.

## **Technical Assistance and Capacity Building**

- 20. **TA on Transit Oriented Development (ToD):** The mission was informed that the comments from NRDA and the Bank on the draft final report are being incorporated and the report is expected to be finalized shortly. The final workshop would be held following this.
- 21. NRDA informed the mission that it thinks it necessary to engage a consultant as they starts the designing of the development plan of the three pilot sectors based on the recommendations of the TOD study. While these sectors are close to Raipur and on the BRT corridor, which would have a significant showcase effect if implemented successfully, the recommendations in the TOD study, namely to change the master plan and the land use code, are quite critical and at the same

time difficult to achieve in the local context. If these are found not feasible, recommendations need to be modified and consultant support would be required. It was informed that the TOD study contract has not yet closed and the consultant is willing to provide additional service. The mission recommended the PIU preparing the scope of work for this task, including clear output and required profile of resources. The PIU is also advised that, if the GEF budget has been used up, additional funding is available.

- 22. **Regional Mobility Plan**. The mission raised the issue of the combined evaluation report for this contract being sent to the bank after contract negotiation and submission of draft contract. It emphasized the need for following Bank guidelines and procedures in a disciplined manner.
- 23. **Monitoring & Evaluation Study**. NRDA requested the Mission for support in reviewing the work being done by the M&E consultants. The Mission noted that the revised report following observations during the MTR Mission was still pending from the consultants. It was agreed that the revised report would be submitted by November 30.
- 24. **Establishment of UMTA**. The Bank through the Australian Aid Trust Fund provided grant funding to the state of Chhattisgarh for assistance in structuring an UMTA for the Greater Raipur Area. The UMTA Approach Paper and Legal draft had been under review. The Mission was informed that the UMTA, chaired by the Chief Secretary, has now been constituted through a Government Order. This is indeed a significant development and the Mission expressed its appreciation of this. The mission requested the PIU to send the English version of the document to understand the final arrangement including the power and activities bestowed in the UMTA.
- 25. **Project Implementation Unit Strengthening**. NRDA informed the Mission that their Project Management Consultants LEA Associates would be providing a senior Transport Planner for support to the Project. In addition, they have submitted a proposal for hiring a Chief Project Manager.
- 26. **Timely disbursement**: The mission commended the good progress of studies undertaken by the PIU using GEF grant. It expressed concern over the long delays in clearing consultant dues which was not only bad practice but also poorly reflected in the disbursement. It was agreed that NRDA would clear the backlog no later than December 31.

#### **Environment Management**

27. The mission reviewed the environmental information provided for the recently finalized location for the BRTS interchange close to the Raipur railways station. The short report confirmed that there was no tree-cutting involved and no sensitive receptors are located in the vicinity. Since the railways will get the work executed, the key issue will be to inform the contractor on the safety during construction, safe circulation of passengers and vehicles, and waste disposal aspects as per the agreed ESMF. The mission discussed how these need to be documented and formally communicated to the railways so as to ensure implementation as part of the Works Contract. The mission also provided a draft outline that the NRDA can suitably modify for preparing the document for the addendum to the EA documentation for Bank review. The mission also requested NRDA to disclose the same as draft for comments on their website and share a link with the Bank when the formal submission is made. It was agreed that the draft will be shared with the PMC and Bank by 15 December 2013. It is expected that clearance from the Bank will be provided after 1 week of the same.

## **Key Agreed Actions:**

- BER submission for NMT infrastructure package Jan 15
- Ensure mobilization of contractor for BRT infrastructure Dec 1
- NRDA to submit draft contract for Construction Supervision Consultancy Nov 22
- Submit draft contract for Study on Regional Mobility Plan Nov 30
- Submit DPR for ITS/ draft bid documents/ issue bids Nov 25/ Dec 2/ Dec 31
- Submit revised designs for NMT improvements at Capital complex/ Sector 27 Dec 6
- Submit project implementation schedule for the BRT December 6, 2013
- Submit revised report on M&E study November 30, 2013
- Share draft supplementary EA/SA document for Railway Pick up point Dec 15
- EOI issued for Consultancy for detailed service plan for BRT lite launch Dec 31
- Submit final report of TOD study and scope of additional support Dec 15
- NRDA PIU staff strengthening to be completed Dec 15
- NRDA to clear backlog in consultant dues December 31, 2013

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

#### **Indore**

1. A World Bank mission met with AICTSL officials on November 13, 2013 in Delhi to discuss and assess the project's progress in regard to the Indore component of the GEF-Sustainable Urban Transport Program (SUTP). The mission met with Mr. Sandeep Soni, CEO, AICTSL, along with other team members of AICTSL and consultants supporting AICTSL on project components, representatives of PMU and PMC.

### **BRT Corridor**

- 2. **Recent Issues with the BRTS corridor**: AICTSL briefed the mission on the development regarding the recent state high court order to allow other two and four wheelers in the BRT corridor. The corridor was planned as a dedicated ROW for the BRT. Soon after the launch of the BRT in April 19, 2013, popularly known as iBUS, a petition was filed in the court arguing that iBus, which accounted for only 4% of the total traffic and occupied 33% of road space, was contributing to congestion and thus the corridor should be opened to other vehicles. On October 1, 2013, the Indore bench of Madhya Pradesh High Court issued an order ruling that the bus lane be opened up to mixed traffic.
- 3. This resulted in several negative outcomes, operational speed reduced from 21km/h to 14km/h; frequency reduced and travel time increased leading to sharp reductions in ridership; traffic accidents increased. However, the ridership is now again improving and is at around 24,000 daily passengers.
- 4. A Technical Committee has been formed by the court and is scheduled to submit a report to the High Court on November 22. The PIU feels confident that the report will support the exclusive use of the corridor by iBus. The court is expected to take a final decision based on the technical committee's report.
- 5. **Passenger survey**: AICTSL has conducted a survey of the passengers of iBus since the high court order and received very positive feedback from the users. The main findings include the following:

80% of the passengers use iBus more than three times a week;

24% shifted from private modes (cars and 2-wheelers),

18% shifted from Tata Magic/Van (mini-bus with a little more capacity than auto rickshaw);

22% suggested adding more buses and relieving congestion;

- 31% suggested provision of other features such as passenger amenities, more plantation, longer running hours, etc.
- 6. **BRT Bus Fleet**. One of the main issues contributing to the above criticism is the current fleet size and the long delays by the bus manufacturer in supplying the buses. Of a total fleet size of 50 buses which are to be plied on the corridor, only 16 buses have so far been delivered which has adversely affected the frequency on the BRT corridor and its carrying capacity. AICTSL informed the Mission that they would be serving a legal notice on the manufacturer and are in the process of exploring alternative options for making good the capacity. They have started diverting some of the city buses suitably remodeled on to the BRT corridor. They also propose to lease more buses in the interim to ramp up the frequency and capacity.

- 7. **Bus depots**: The PIU informed that currently there are no bus depots available for AICSTL, but a land for a temporary depot has been secured which currently has a holding capacity of 25-30 buses. This will be upgraded with necessary facilities in two to three months.
- 8. **Other activities**: The mission advised the PIU to consider additional activities to be undertaken under SUTP. Considering the remaining time available for the project, it was also advised to be careful if such activities involve safeguard matters.

#### **ITS Component**

- 9. AICTSL managed to launch the ITS procurement ahead of the announcement of the modal code of conduct, and after suitably incorporating feedback from prospective bidders received during the bidders conference organised by them and written comments received.
- 10. The Pre-bid meeting is scheduled on 18<sup>th</sup> November 2013, and AICTSL agreed to share the responses to the queries and any addenda within a week's time for review of PMU and the Bank, and no later than 25<sup>th</sup> November.
- 11. The Mission again reiterated its earlier suggestions to make adequate provisions in the RFP to, (i) ensure against the hardware failures and vandalism observed in the case of Mysore; and (ii) ensure integration of fare collection between the BRT and the city bus service.
- 12. **Integration of BRT and City Bus**: Currently, the BRT and feeder bus require different tickets, making transiting passengers pay each time they board a bus. This is suboptimal and prevents the bus system from achieving its potential.
- 13. The Mission was informed that two options have been identified and examined by the consultants thus far: (i) Collect passenger data from operators and adjust revenue through funds transfer, and; (ii) Collect fare revenue at clearing house and distribute to operators. Fare revenue stays with each operator in the  $1^{\rm st}$  option, whereas revenue will be centrally collected in the  $2^{\rm nd}$  option. The  $1^{\rm st}$  option has fewer technical issues, but more contractual issues than the  $2^{\rm nd}$  option because currently all non-BRT buses operate on the net cost model. AICTSL shared that they had had discussions with the bus operators on the matter and the operators are agreeable to shifting to the  $2^{\rm nd}$  option.
- 14. The mission reiterated the importance of the fare integration and recommended that the PIU organise another meeting with the operators along with the consultants and present the above two options again in order to make sure the concepts, expected benefit, and cost implications, are clearly understood by all concerned. The PIU was also advised to contact Jaipur City Transport Services Limited (bus SPV for Jaipur city) to learn from their experience of implementing the automatic integrated fare collection system. The PMU offered to share a report by MoUD on Automated Fare Collection System with the PIU.
- 15. **ITS Counterpart Funding**: The additional funding requested by Indore for ITS and Bus doors has been approved under JnNURM. The revised cost table now includes a line item for "Utilities (power back-up)" and "Transit Mgmt. System (CAD/AVL)".
- 16. **Revised Project Description**. The Indore city project description originally included Traffic Signal Priority (TSP) and Automatic Fare Collection Systems. The Mission advised AICTSL to formally request a change in the project description to include 'CAD/AVL' and cancel TSP which was not under consideration at present owing to its potentially lower impact

and therefore priority. They should write to MoUD and DEA explaining the rationale so allocated funds can be used towards CAD/AVL instead.

- 17. **Technical Assistance Activities**. The Mission reviewed the status of the proposed TA activities.
- (i) Preparation of BRT Accessibility Plan, including pedestrian access: The RFP has been issued to the shortlisted firms, and the pre-bid meeting is scheduled on November 22 with proposal submission date on December 27;
- (ii) *Monitoring & Evaluation Study*; The Bank urged AICTSL to expedite the M&E activity which could also have benefited the evaluation by the Technical Committee and the Court. It was agreed that AICTSL would submit their revised proposal providing for both the before and after situation by December 15.
- (iii) Preparation of a business plan for AICTSL. AICTSL agreed to share the draft ToR along with EoI for the activity by December 20, 2013.
- 18. **PIU** strengthening. The mission was informed that AICTSL is in advanced stages of finalising candidate for (i) Transport Planner, (ii) ITS Expert and (iii) Legal Advisor. Interviews are scheduled on November 30 and they expect to finalise by December 15.

#### **Additional GEF Grant**

19. Discussions were held regarding additional requirement for GEF grant funds to cover activities supporting the BRTS and overall public transport in the city.

#### **Key Agreed Actions:**

- Submit Request for change in Project Description November 30
- Submit pre-bid minutes and addenda for ITS tender / Submit BER Nov 25/ Feb 1
- Submit clarifications and corrigendum for BRT Accessibility Study/ Submit TER Nov 30/ Feb 15
- Finalise post Project M&E arrangements December 15
- Submit draft ToR/ EoI for Business Plan December 20
- Complete AICTSL strengthening December 31

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

#### Mysore

1. A World Bank mission met with KSRTC officials on June 13, 2013 to discuss and assess the project's Mid-Term Review in regard to the Mysore component of the GEF-Sustainable Urban Transport Program (SUTP). The mission met Mr. Manjunatha Prasad, Managing Director, KSRTC, along with other team members of KSRTC and their consultants to discuss the project's progress. Also present in the meeting were representatives from PMU and PMC.

#### **GEF-SUTP Funded Project**

- 2. **Intelligent Transport Systems**. Intelligent Transport System (ITS) was implemented and launched in November 2012, and has following sub components:
  - Passenger Information System (PIS)
  - GPS based Automatic Vehicle location (AVL) System
  - Monitoring center to track and monitor bus movement through GPRS based devices
- 3. The mission was informed of the recent malfunctioning of the ITS system installed for the 458 city buses of Mysore and discussed the causes and the remedial measures for this problem. The mission expressed its serious concern over the delays in rectifying the persistent problems especially with vehicle mounted units (VMU) and requested the PIU and the consultants to prepare an action plan that specifies further actions to be taken by relevant organizations and specify timelines to ensure the system becomes fully operational. The report needs to be based on more comprehensive understanding of the causes of problems in each subset of the system, remedial measures taken to date, and assessment of the effectiveness of such measures. It was agreed that this action plan will be prepared and submitted by November 25, 2013.
- 4. ITS was launched in Nov 2012 but due to continuous issues / problems with Vehicle Mounting Device (VMU) "operational acceptance" test is still not completed and KSRTC has not accepted the system for operations yet. Due to faulty VMU device following issues are reported by M&E consultant:

a. ETA at bus stops : 51% showing correct time

b. In-board display (IBD) : 74% operational c. In-board audio (IBA) : 51% working

- 5. The System Integrator CMC informed the mission that they have resolved the issue / fault with all 458 VMU's. Operational test for VMU's (after repair) has not started yet as both the WAN links from control center is down from last 2-3 weeks both the WAN links are from same service provider. System Integrator is in touch with two service providers i.e. Tata Telecom and Airtel to provide the internet bandwidth. ISP link from Tata telecom will be operational around 28th Nov. Once the ISP link will be operational, consultant will start receiving data from repaired VMU devices for testing.
- 6. CMC agreed that correctness of ETA at bus stop is too low, they mentioned that this is also due to non-filling / submission of Form-4 by depot staff. Mission recommended M&E consultant to include issues like these in their monthly progress report.

Due to increase Scope of Work (no. of bus stops has been increased from 958 to approx. 2000), this has also increased the storage requirement of audio files in each VMU. This is one of the reasons why in-board announcement is not working. System Integrator is looking for alternate solution to address the issue. It was agreed that a timebound action plan will be prepared and shared with PMU and the Bank. A meeting will be held on December 15, 2013, to review the progress on the Action Plan submitted.

- 7. Managing Director (KSRTC) mentioned that, as per the current plan expected go alive date is 1<sup>st</sup> January 2014 (including operational test).
- 8. **Monitoring and Evaluation** (M&E): The Mysore ITS Project is the first of its kind in India the objective of the demo pilot is to probe the difficulties in the implementation and operation and document the learnings for other cities in the country. The M&E consultant was accordingly given a scope to track closely the implementation so that problems can be detected in the early stage and lessons properly documented. However, the mission was highly disappointed with their output thus far, which did not serve the purpose of either flagging issues to concern to management, nor of accurately presenting the progress or recording the results indicators required to be tracked. The consultant agreed to provide more close and intensive effort into the work and to improve the quality of reporting.
- 9. Comprehensive Services and Operational Analysis (CSOA) study: This objective of this study is to review and improve KSRTC's internal efficiencies and effectiveness of its operations at Mysore. The activities include: Review KSRTC Mysore operations; Develop a fully allocated Operations and Maintenance Cost Model; Study the operations and evolve Key Performance Indicators for route evaluation; Route analysis; Analysis of Key Business Processes, Commuter Facilities, Competitive Fare Structure; Characteristics of Demand and Supply balance, KSRTC constraints for Scheduling; Develop the Public Transport Network Model for existing and proposed network and cost estimates; Evolve a list of recommendations along with priorities and assist the implementation.
- 10. The progress of the study was unsatisfactory. The consultant has not responded to the task team's comments for the draft inception report, which was given about 1.5 months ago. It was highlighted to the mission that more than half of key experts nominated by the consultant have already left the team, which could be contributing the inaction of the consultant. It was requested by the mission and agreed that, the consultant would request the clearance of the substitution of the experts through due process via PMU, the consultant would submit revised inception report incorporating the comments from the task team, and the consultant would revert to the comments in a timely manner in all future communications. It was reiterated that the substitution of experts is an irregular event that can only be permitted in special cases, and if deemed necessary, a substitute has to have equal or superior capacity to the original expert, and it has to be done following due procedures. Given the current status, it is expected that the study will complete by November 2014.

## **Additional GEF Grant**

11. The Mission discussed with KSRTC additional requirement for funds to support the ITS Project or other initiatives of the Mysore city service. KSRTC indicated that they had requested additional funds for marketing and promotion activities for the ITS Project. It was agreed that such activities could be considered for funding and KSRTC to submit a revised proposal outlining a reasonable scope of work.

# **Key Agreed Actions:**

- ITS Remedial Action plan: 25 November 2013
- Action Plan Review meeting: December 15, 2013(with IBI / CMC / KSRTC / WB staff)
- Submit M&E Survey Report
- Submission of request for replacement of experts for CSOA study: November 22, 2013
- Revised inception report for CSOA study: November 22, 2013
- Submission of Proposal for Additional GEF Funds December 2

Annex 5-A

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

# Mysore - Proposed Public Bike Sharing Project (PBS)

- 12. The Mission had visited Mysore on 13 June and Bangalore on 14 June during the MTR Mission to discuss the proposed Public Bike Sharing Project with Mysore Deputy Commissioner and DULT. Key agreed actions included:
  - Submission of revised DPR
  - Submission of note on implementation arrangement for Public Bike Sharing (PBS) project
  - Submission of complete FM Assessment and Procurement Assessment questionnaires
- 13. The Mission raised the matter of lack of progress on the agreed actions with Commissioner DULT. It was explained GoK was keen to receive the grant funds for a five year duration in order to ensure full support during both the implementation and operations phase of the Project. The Mission confirmed that the Project closing date was November 2015 and funds would not be available post its closing. DULT promised to revert with a final decision no later than **December 15, 2013**.

Annex 6

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

- 1. A World Bank mission visited Bangalore and Hubli-Dharwad on November 14-17, 2013 to discuss the implementation 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.
- 2. **BRT Project:** The HDBRTS Project aims at 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 fare collection system, with integrated ticketing of trunk and feeder services.
  - The trunk fleet will initially consist of 110 standard (12m) and 30 articulated buses, with a floor height of 900 mm above ground level.
  - Level boarding and alighting.
  - ITS for BRTS and ATCS for traffic management along the corridor.
  - 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 the BRT and suburban & city services.

# **Technical Discussions**

- 3. **BRT Alternatives in Dharwad:** In response to requests from concerned residents of Dharwad, various options have been considered to minimize land acquisition in the northernmost section of the BRT. These include (a) splitting the busway into two one-way busways, (b) cutting the busway short before entering the densely built-up area, (c) building the busway on elevated structure, (d) narrowing the right-of-way (ROW) width between stations to 24m by deleting the third BRT lane to be used for over-taking, and (e) narrowing the general ROW width to 30m by reducing mixed-traffic road and sidewalk standards. All these options would require less land acquisition than (f) the original option with a general ROW width of 35m as specified in the DFR.
- 4. The first two options had previously been discarded as unfeasible, but extensive discussions took place during the current mission on the latter four, based on a thorough estimate of land requirements prepared by CEPT consultants. Option (d) which the World Bank team had suggested for consideration was discarded, as ROW takings of varying width were considered to be impractical. It was agreed that the remaining three options (c, e, and f) would be further evaluated and a decision reached by end-November.
- 5. **BRT Flyover at Jubilee Circle:** While the mission is not convinced that the BRT on a long elevated structure is desirable because of its operational, urban blight and cost implications, it came to the conclusion that a short elevated section is required across Jubilee Circle. Because of the street configurations in Dharwad, it is virtually impossible to simplify traffic signal operations at that location (5 signal phases, signal cycle of 170 seconds of which only 40 seconds are for the BRT corridor). A BRT crossing at grade would impose red-signal delays of up to 130 seconds on the BRT buses, leading to unacceptable bunching of 3-4 buses in each signal cycle.

There was agreement that a busway flyover over Jubilee Circle is essential and would have to be part of any of the three alternatives being evaluated.

- 6. **Other Alternatives**. DULT and HDBRTSCO are also in the process of reviewing alternatives for two other locations where there has been resistance from affected parties, (i) Dargah at Bairidevekoppa and (ii) RoB at Nevalur.
- **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 general station design proposed for Hubli-Dharwad 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. Following the last mission, the World Bank gave its noobjection to the seven specific station designs, subject to the following provisos: (a) omit the symbolic "end marker" from the station design and (b) ensure level busway alignment (i.e. no table-top footways across the busway, implying a slight lengthening of the station access ramps). The CEPT representative confirmed that the station tender documents have incorporated these comments. The Bank team also voiced some questions regarding the capacity of the two flap gates (one IN and one OUT) to be provided at each station exit. Following extensive discussions on that subject, the mission recommends that the consultants calculate the throughput conditions for a situation in which two articulated buses arrive simultaneously (in opposite directions) at a station and start disgorging passengers; if the waiting queue of exiting passengers were to exceed 20-30 seconds, additional flap gates should be provided, which might call for a design modification at some high-demand stations. If the required gates were to be provided on FOBs, the needs of non-passengers crossing the corridor would also have to be taken into account.
- 8. **Foot Over-Bridges (FOBs):** In addition to the accesses to BRT stations, pedestrian overpasses are proposed at 9 mid-block locations. (Previous missions had indicated their misgiving about the wide-spread use of pedestrian overpasses but understood the reasons why they are to be built). The standard design of FOBs envisages ramps that are suitable for the movement of persons with disabilities. This is very good. However, the mission repeats its previous suggestion to also consider the building of stairs at each side of the FOB which as they are shorter would be preferred by many pedestrians.
- 9. **BRT Corridor south of Hosur Cross:** The DFR had specified that the BRT services be split along the current parallel one-way thoroughfares of Glasshouse Street (northbound) and Swimming Pool Complex Street (southbound). The BRT lanes were be delineated by a painted line, with two one-directional BRT stations near the southern merge of the two thoroughfares. The proposed BRT operation seemed plausible as the two thoroughfares (both about 600 m long) seldom congest.
- 10. The current mission was informed that the following changes have been proposed to the original BRT proposal:
  - The BRT buses would run in a segregated 2-way busway along Glasshouse Street. No other traffic would run in Glasshouse Street, except for northbound city buses and cars on a 1-lane access to IT Park.
  - Southbound city buses and all mixed traffic would be concentrated in Swimming Pool Complex Street, which would be changed from 1-way to 2-way operation.
  - The changed traffic flow pattern would require additional signal phases at Hosur Cross and the southern end of the current one-way pair.

- 11. After analyzing the proposal and visiting the sites in the field, the mission is highly concerned that the new traffic pattern would create new traffic bottlenecks at Hosur Cross and the southern end of the current one-way pair. The benefit of combining two one-directional BRT stations into a single two-directional one is likely to be more than outweighed by the reduced green time available for BRT buses at Hosur Cross and the probable general traffic congestion generated by the scheme. It is also probable that people would object to the change from one-way to two-way traffic operation, especially if this change generates traffic congestion. For the same reason, the Municipal Corporation may be reluctant to approve the scheme, as is yet required. The mission recommends that capacity calculations be carried out for the proposed new traffic flow pattern, and that reverting to the original one-way system be seriously considered.
- 12. Construction of BRT Corridor between CBT and Hosur Cross: It is planned to tender the construction of the southernmost BRT stretch in December 2013. Except for the Hosur Cross Glasshouse Street section discussed in the preceding paragraphs, the Bank team has no objection to the basic geometric layout proposed. During the field visit, it noted that the carriageway surface is in poor condition at various locations, and that some pavement reconstruction (rather than just the proposed resurfacing with a flexible pavement layer) may be needed; also some sidewalk stretches may require rebuilding, and some repairs may have to be made of underground drainage. The mission trusts that these structural factors have been duly considered and recommends that, once the tender documents are sent to the Bank for its no-objection, appropriate structural designs and specifications be included,
- 13. The mission was told that the Hubli-Dharwad Municipal Corporation and traffic police have yet to approve any designs that differ from those of the DFR, including the Hosur Cross Glasshouse Street section (if reconfigured) and a section south of Rani Chennamma Circle. It hopes that the required approvals be issued very soon.
- 14. **Last-Mile Connectivity:** Outline plans for pedestrian-friendly infrastructure were shown to the previous mission for Navanagar and Dharwad. The concept is to develop networks of convenient sidewalks and walkways, most of which are feeding BRT stations and the Jubilee Terminal. The <u>mission recommends</u> that future additions to that component should focus on walking facilities (perhaps 500 to 1000 meters long) that provide direct access to BRT stations with emphasis on the currently built-up areas. The network could be extended in a phased manner.
- 15. **BRT Transfer Terminal at Jubilee Circle:** As the BRT would cross Jubilee Circle on an elevated flyover, its Terminal station is also proposed on an elevated structure. Passengers would use escalators to descend to / ascend from ground level, where the bays for feeder buses would be located. Up to now, no layouts have been prepared for the feeder bus terminal; this is now becoming an important link of the critical path for the entire BRTS project, as the bus and passenger facilities at the terminals must be ready when the BRT buses start operating. The mission recommends that preliminary designs for that terminal be expedited and sent to the PMU / World Bank as soon as possible.
- 16. **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 repeats its earlier recommendation that signal phasings be defined and capacity analyses carried out for the key intersections in Hubli and Dharwad.

- 17. **Parking of Cars and Two-Wheelers:** Apart from the BRT busway, the corridor design provides 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 previous 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.
- 18. As promised to the previous mission, DULT recently shared with the Bank the draft of the new State-wide parking policy, and an outline program for Hubli-Dharwad. The Bank's team sent some comments in response, the principal one being that the development of a local implementation plan would take much more time than the 4 months indicated in the policy document. The mission supports the State's initiative in this respect and recommends that steps be taken urgently to start the development of a Parking Action Plan for Hubli-Dharwad.
- 19. **Public space planning along built-up areas of BRT corridor:** CEPT has carried out much valuable work in designing the BRT and mixed-traffic roadways of the corridor. The detailed interface with the existing buildings, side streets and alleys in the built-up areas of Hubli and Dharwad is another important element that should be added to the work plan similar to the "last-mile connectivity" component that is considered near the final stations of the BRTS. This would also present a good opportunity to involve the owners and occupants of the buildings lining the BRT corridor. Following their visit to Hubli-Dharwad, the <u>Bank team</u> had some internal discussions about the subject and <u>suggests</u> that the following activities be considered:
  - Carry out a block by block inventory of streets, alleys and other public space within 30-50 m wide strips along both sides of the corridor
  - Develop an improvement plan (physical and operational), to (a) enhance the quality of life in the affected area, (b) provide convenient pedestrian access to the nearest BRT station, and (c) shift the parking or standing of vehicles from the main corridor to the side streets and alleys.
  - Neighborhood groups could be invited to participate in the planning process, which would (a) improve the product of the improvement plans, and (b) involve the community at large in the implementation of the BRT.
- 20. **Procurement Progress and Implementation**: Tenders have been awarded for construction of BRT Depots at Hubli and Dharwad and for a divisional workshop at Hubli (Package 8), meanwhile two packages, 9 and 10, for Dharwad OCBS and Hosur Terminal, bids are expected in early December. The Mission advised HDBRTSCO to expedite preparation of Bid Documents for other infrastructures that could be initiated without acquiring of land. It was agreed that the bid documents for Road Package in Hubli (Package 1), BRT stations and pedestrian infrastructure would be submitted for review by 15, 10 and 5 December. The Mission again advised DULT and HDBRTSCO to prepare a revised BRT Implementation Schedule for

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tracking the timelines for Project delivery and also optimizing the sequencing of the various activities. It was agreed that such a Plan would be submitted by November 30.

- 21. **Technical Assistance**. DULT informed the Mission on the status of the Consultancy Services and training agreed to be taken up as part of the GEF project:
- 22. The Mission appreciated the good progress on consultancy procurement. The Mission interacted with the Consultants for M&E of Social Safeguards, Communications and Outreach and PMC for BRTS.
- 23. The PMC for ITS is under procurement and the TER is expected shortly. EoI for Land Use and Transport Planning Consultancy has been issued and the revised ToR based on the comments provided shall be submitted by December 7.

The Mission feels that there are additional activities that would benefit the Project. These include

- i. Public Space Planning Study that would be quiet critical for ensuring a smooth implementation of the BRT system in built up areas;
- ii. Parking Masterplan to support the public transport system being developed; and
- iii. Landscaping Architect for the Project etc.

Since the GEF grant is already exhausted and several of the activities are being funded by DULT/HDBRTSCO, the Mission recommends additional allocation of GEF funds to the Project.

#### Social Safeguards

- 24. The mission held discussions with HDBRTS Company, local authorities, NGO and Monitoring consultants and also undertook field visit to road and interacted with PAPs and religious Trust leaders. The summary of discussions and field visit observations are summarized below.
- 25. Land Acquisition. The mission noted that lot of efforts have gone into to advance the joint measurement of affected proprieties and initiation of consent award negotiations with the land owners. The joint measure is completed for 8 out 9 villages/Towns. The survey could not be completed in the remaining one village-Navalur due to resistance from the villagers due to intended physical displacements and the final decision on widening of ROB (either on left or right or equally from the existing central line) is not yet taken. The overall land acquisition is now increased from originally envisaged 65 acres to 70 acres. The final notication of land acquisition will be issued when the remaining joint measurement is completed in Navalur.
- 26. Consent award Negotiations. The consent award negotiations for first 3 villages (Rayapur, Sattur and Amargol) were held recently and the rates demanded by the land owners are to the extent of 4-5 times. The guideline values are updated for 2013-14 and these were considered as base rates for negotiations. During the discussions with one of the land owners, expressed that compensation at the rate of two times of latest guideline rates will be reasonable. During the next round of discussions, the compensation rates are expected to be agreed.
- 27. Structure Valuation. The structure valuation requires to proceed along with consent award negotiations since the compensation for affected structures need to be included in the overall compensation. The discussions with HDBRTS reveal that this process is completed in three villages, where the impacts to be structures appears to be substantial. Out of the 70 affected structures in Amargol, Rayapur and Sattur, a large majority of structures are fully affected. The

valuation is done based on the current schedule rates without depreciation and additional 25% is added in case of partially affected structures to allow for in-situ reconstruction. The mission was informed that process for engaging a private agency for building impact assessment and structure valuation is in progress and expected to be completed soon, so that valuation in the remaining villages/Towns can be carried out.

- 27. Impact of Layout approval conditions. A new impact has been encountered by the project wherein land along the road were converted in the past to residential, commercial, industrial and institutional uses. At the time of approval of layouts conditions were stipulated as per the provision of Urban Development and Town Planning Acts, that certain portion of the lands were to be relinquished for service roads, road margins, open spaces, etc. However, these lands were never handed over and some of these lands were also sold. Out of the total private land proposed for acquisition, about 22 acres of lands was supposed to have handed over to local Municipal Corporation (HDMC) and the HDMC has now issued notices for relinquishing the lands as per the layout approval conditions. However, the implications of those plots sold by some of the land owners need to be addressed in line with R&R policy provisions. The mission advised to HDBRTS to assess the impact in terms of extent and number of sellers involved in those 22 acres of land and proposes measures to mitigate the impact among those who are purchased and submit the note to the Bank for review and comments.
- 28. Field visit observations. During the field visit to the road section, the mission interacted with some of the affected people and representatives of religious Trusts. The randomly verified during the field visit confirms that the originally identified non- title holders have received the identity cards showing the details of affected people and likely assistance to be provided. Some of the affected squatter petty shops expressed that they are finding it difficult to find suitable alternative place and also one the affected tenant who has been staying for more than 20 years is finding it difficult to get suitable alternative premises with similar rent. The mission also met 7 petty shopkeepers who are already displaced more than six months ago and are yet to be provided the eligible assistance under the project. These shopkeepers are moved away from the RoW and have occupied adjacent the temple premises by paying monthly rent. Non-payment of R&R assistance for a long time amount to non-compliance under the Project R&R policy and advised to HDBRTS that this amount should be paid immediately. This was also brought to the notice in the previous missions also.
- 29. Impact on Religious Structures. As many as 17 religious structures will be affected either fully or partially. The mission noted that the RAP consultants and project Team are engaged with the stakeholders of the affected religious structures to find solution to shift the affected structures and understanding reached with most of them for shifting to the alternative locations, MOUs are yet to be signed. However, there are still few religious structures that are resisting for demolition and insisting on avoiding the impact. The mission met some of the leaders of religious trusts, who are resisting to the impact on these structures. A copy of representations was given to the Mission by the Managing committee of Darga requesting to avoid the impacts to Darga, as this is more than a century old and a large number of pilgrimages visit every year for spiritual needs. Their plea is also that an open private land is available on the opposite side so that alignment can be modified to avoid the Darga or the option of flyover can be considered. The mission conveyed to the members that these were considered by the project in the past and a meeting can be organized to explain the outcome of review and also discuss the way forward to address the issue. IN another case, (Siddeswar Temple, Unkal), there is strong resistence, though the impacts is partial.
- 31. R&R Impacts. The R&R implementation support consultants have engaged in series of consultations with the affected people and also verification of the impacts on the ground and

made adjustment in the nature of impacts from those identified in the RAP. As a result the net impact on non-title holder is now increased to 39 from 87. The overall impacts are now increased from 1408 to 1505. The consultants are also engaged with specific focus group discussions and are also assisting HDBRTSCO during the joint measurement survey. The identity cards to about 30 Squatters have been issued and issued of cards to others is expected in the coming months. An orientation for income generation activities was also organized. The communication consultants have developed a brochure on Land Acquisition describing the key features such as entitlements for different type of impacts, land acquisition process and the details of grievance and Negotiation committee composition, the process of identifying the people for eligible R&R assistance, etc.

- 32. The mission held discussions with R&R implementation supporting consultants and M&E consultants and advised that the assistance to the vulnerable people and ex-gratia for the affected squatter structures need to be factored into the individual entitlements and also advised the M&E consultations to reflect in the quarterly monitoring reports on the compliance with policy provisions through random verification on the ground, highlight on any shortcomings, the feedback from the people who received assistance, highlight on the implementation progress and suggest to address any short comings. The M&E consultants have summited their first quarterly progress report which mostly contain the monitoring formats and preliminary consent award negotiations discussions.
- 33. Addendum to RAP. As a result of joint measurement survey, impact of handing over of 22 acres of land from the total private land under acquisition as per lay out approval conditions and changes in the impact categories of PAPs a result of verification affected people, an addendum to already approved RAP needs to be prepared and the revised list of affected people need to be included and disclosed. The mission explained that this addendum should include a brief description of the changes from RAP, outcome of consultations held so far with various groups and, options considered and finalized in case of Dharward city in response to peoples request and the revised list of people. The Addendum will be finalised after issue of Final land acquisition notification, completion of assessment of impacts due to handing over of land due to layout approval condition and alternative options considered and include in the design in Dhār wad.
- 34. *Impact of RFCTLARR*. The new Act on land acquisition-Right to Fair Compensation and Transparency in Land acquisition, Rehabilitation and Resettlement (RFCTLARR) is expected to be effective in early 2014 and mission highlighted the retroactive provisions of the new Act, which requires that land acquisition need to be re-started under the new Act, if the compensation awards are not made by the effective date and the compensation needs to be paid as per the provisions of the new Act if the compensation is not paid by the effective date. The mission was informed that the HDBRTSCO has sought advice from Advocate General on the applicability of the Act to the project since the land acquisition is acquired under the State Highway Act.

**Dated Action Plan.** The mission discussed the following key target dates for the activities to be completed in the next few months. .

No	Actions	Responsibility	Target Date	Remarks
1	Pay R&R assistance to those already displaced	HDBRTSCO	30-Nov-13	
	7Non-title holders			
2	Note on Impact of handing over of land to HDMC	HDBRTSCO	15-Dec-13	
	due to layout conditions			
3	Issue final LA notification U/S 19 of KSHA.	KRDCL/	31-Dec-13	
		HDBRTSCO		
4	Addendum to RAP to record additional LA and	HDBRTSCO	31-Jan-13	
	R&R Impacts and Final list of PAPs			

5	Public Consultation Workshop	HDBRTSCO	31-Dec-13	
6	Consent Award negotiations and Compensation	KRDCL/HDBRTS	28-Feb-14	Delayed by
	Award announcement	CO		about 10 mon

#### **Environment Management**

- Traffic Management on BRT Corridor: In its meetings with officials from DULT, HDBRTS Company, and other stakeholders in Bengaluru and Hubli, the mission emphasized the immediate need for improving traffic safety in the ongoing road works. The mission noted that while there is only minor improvement in the situation, substantial efforts are required to the safety of other road users on the very heavily trafficked project road where 4-laning is currently underway with minimal effective safety measures. This has been pointed out during previous missions and continuing delays would lead to downgrading the environment safeguards rating. The mission advised the HDBRTS Company to ensure that the EMP provisions pertaining to safety of pedestrian and vehicular traffic must be one of the highest priority activities of the ongoing contract. It agreed with the proposal of using the environmental specialist of the PMC of HDBRTS for assisting KRDCL in reviewing the works on the ground on a weekly basis, with follow-up actions to be finalized during the subsequent co-ordination meeting between KRDCL and HDBRTS. This must begin as soon as possible and continue till all deficiencies have been rectified and arrangements are put in place for reporting on these as construction progresses. The key items that need augmentation are provision of barricading, additional information signage, provision of reflective strips at road or construction edges to delineate steep falls, etc. The other items that need confirmation include the use of personal protective equipment by construction workers, continued availability of regulatory permissions for plants and machinery, and the provision of proper facilities in the contractor's campsite. It was agreed that this modality will be reviewed after about 6 weeks and assessed for effectiveness and its outcome will be shared with the Bank as part of the QPR for December 2013.
- Tree Plantations. The mission was pleased to note that 7800 out of the 8000 saplings agreed to be planted during the current year have already been planted and little damage to these is reported until now. The mission also noted that another 804 trees have been identified for cutting following Joint Measurement Certificate survey along the alignment, and that there may be some additional tree cutting in Navalur village, where the JMC is yet not complete. The mission emphasized that the plantation activity needs to be tracked and should keep pace with the original plan agreed as part of the Green BRTS related activities. It requested HDBRTS company officials to ensure that land availability for remaining plantation is confirmed well in advance, and in coordination with HDMC and HDUDA as appropriate. During the meeting with the HDMC, the mission also recognized that availability of spaces needs to be a joint exercise with the Horticulture/Garden department and should be completed before the next planting season. It was informed that the limited availability of land with water sources close enough to allow timely watering in dry seasons could become a constraint since many plantation locations have been used up in the HDMC plantation drive during this season. Another issue that needs to be handled in advance of plantation in the next season is protecting new saplings since the areas with protective compound walls have almost been exhausted. The mission agreed that the HDBRTS Company's strategy to request local sponsorship of tree guards does offer an alternative that needs to be fully explored and implemented if it can be done in a timely and consistent manner. These matters should be deliberated in the Green BRTS committee meetings and a final decision taken in this regard so that upfront activities can be initiated. It noted that the recent decision on handover of roadside land parcels from layouts along the corridor to HDMC may also help identify designated 'park' areas close to the corridors in line with the Development Plan. These spaces can provide some of the 'character' to corridor if developed with a corridor wide view of the plantation and development activity rather than a location specific development. HDBRTS

Company has agreed to provide an update on the land availability and park land identification in the QPR for December 2013.

- 37. Rayapur Lake. For Rayapur lake along the alignment, the mission was informed that the HDBRTS company is looking at developing area around it for recreation and compensatory volume provision is being considered for the Navalur lake, about 200m from the alignment, in the same watershed. The reason given is that deepening in Rayapur may not be appropriate. The mission suggested that this should be based on consultations with Lake Development Authority, which need to be documented. It noted that Navalur is much larger and would require that HDBRTS Company work closely with another GoK department Minor Irrigation, its owner. The mission was informed that preliminary discussions indicate that this may not be difficult. It was agreed that progress on this aspect will be reported in December 2013 QPR.
- 38. Alternatives Analysis. The mission strongly recommended that the ongoing of analysis of alternatives should include systematic consideration of environmental criteria such as number of trees cut in different options, increased exposure to air and/or noise pollution in case of sensitive receptors, and these should be documented in the revised EA documents that need to be reviewed by the Bank. While the option analysis continues, revision to the EA documentation must start in parallel and items already known such as additional trees, options for Rayapur, etc. should be kept ready so that the document completion can be expedited once the final choice is made.

#### **Communications & Consultations**

- 39. There has been considerable progress on stakeholder outreach and communications around the project. Information-sharing and consultation sessions with some stakeholder groups have been initiated and structured media interaction has begun. A Project Information Center has been set up in the HDBRTSCO office as a one-stop platform for putting out all relevant information about the project. A workshop to familiarize local journalists about the project and increase their understanding of the concept was held. Some key communication collaterals such as a Master Presentation (that addresses basic information needs of most stakeholders), project brochures (some yet to be finalized), a website (http://www.hdbrts.co.in/index.php), and an information board are now in place.
- 40. Stakeholder Concerns: HDBRTSCO has reached out to some of the environment groups who had expressed concerns about the possible environmental impacts of the project and has involved them in collaborative environment management, especially around the plantation works. The company has also begun some proactive dissemination about its re-plantation drive in an attempt to address similar concerns among the general public. In response to demands from some other project-affected groups in Dharwad, the company is looking at various design alternatives keeping technical and design feasibility, as well as land acquisition impacts, in mind. Once these have been firmed up, they will be shared with stakeholders as well. The plans to conduct familiarisation visits for key stakeholder groups to other BRT cities are also useful initiatives to build broader buy-in for the project.
- 41. Communications Plan: The communications consultants (IBI-CEE) engaged by for HDBRTCO have undertaken a situation analysis survey which captures stakeholders' communication needs and concerns about the project. Based on this, the consultants have developed a draft Communications Campaign Plan outlining a list of communication activities/interventions up to December 2015. The draft Plan has been submitted to DULT and HDBRTSCO.
- 42. More detailed feedback on the draft Plan will be shared separately but, broadly speaking, the draft focusses primarily on the pre-launch and the launch phases and does not fully address

some of the communication challenges that are already facing (or are likely to face) HDBRTSCO in the preparation phase, especially vis a vis some critical stakeholder groups such some sections of project-affected people, local city-level politicians, partner entities such as KRDCL etc. Some of these stakeholder groups such as the large shopkeepers from Dharwad or car showroom owners have already emerged as not-fully supportive of the project and it will be useful for the communication consultants could drill down further to address the communication needs of these small but vocal groups in a strategic manner.

- 43. The campaign plan recommends a whole bouquet of communication interventions for HDBRTCO to implement. While these have been mapped to the various phases of the project's implementation, the activities have not been prioritized. Without prioritization, it will be difficult to HDBRTCO to plan for, finance and monitor the implementation of the activities.
- 44. A more detailed stakeholder perception-and-influence-mapping exercise could be useful, not just to help in the drilling-down mentioned above, but also as a baseline tool that could be revisited periodically to assess perception and influence shifts taking place among stakeholders and help calibrate communication efforts accordingly.
- 45. Collaboration with RAP Consultants: In order to effectively communicate with the key stakeholder group of project-affected people, it is critical that the communications consultants work much more closely with relevant HDBRTCO officials and the RAP Consultants (who interact with PAPs almost on a daily basis) during the land acquisition and compensation disbursal phase of the project.
- 46. Presence on the ground: It appears the consultants have not spent much time in Hubli-Dharwad, and discussions with the client have also been mainly held in Bangalore. It is strongly recommended that the consultant team spend more time on the ground in Hubli-Dharwad, not only in order to make sure that the proposed communication activities are implemented soon and efficiently, but also in order to help enhance HDBRTSCO's internal capacities on communications. Working closely with a professional communications team will help a wider cohort of HDBRTSCO staff acquire the communication sensitivities and skills that can help with smoother implementation of their project.
- 47. Staffing: The company had advertised for a post of Public Relation Officer and a person who could work as the PRO was also identified but the hiring fell through for various reasons. This post needs to be filled urgently so that HDBRTSCO has inhouse capacity to handle communications-related issues and to guide and oversee the work of the consultants. The IBICEE consortium has recently placed a person full-time in the HDBRTCO office in Hubli but he is not likely to be able to support HDBRTSCO in playing the role of a PRO.
- 48. *PIC*: Some suggestions to enhance the effectiveness of the PIC include: making the project layout map more accessible; ensuring that the issue people bring to the PIC is recorded along with their contact details; stocking the PIC with copies of all relevant studies and reports including the EIA, RAP, details of the JMC survey; and ensuring that project information brochures are available for walk-in visitors. Draft project brochures have also been developed, but are yet to be finalized. These need to be frozen soon and distributed for them to be of use.
- 49. **SUTP Weblink**: The Mission also noted that the HDBRTS website should be linked to the SUTP website (<a href="www.sutpindia.org">www.sutpindia.org</a>) by MoUD and a section created for the new demo city and project on the SUTP website.

# **Key Agreed Actions**

- Submit BER for Package 9 & 10/ Contract Award Jan 10/ Feb 10
- Submit of updated RAP and EIA / EMP for Bank review
- Submit final decisions along with Alternatives Analysis documentation Dec 15
- Submit bid documents for Road Package in Hubli (Package 1), BRT stations and pedestrian infrastructure for review by 15, 10 and 5 Dec
- Submit BRT Implementation Schedule for tracking timelines for project delivery and optimizing sequencing of activities Nov 30
- Confirm final decision on road 4to8-laning contract Dec 31
- Traffic Management improved on road corridor Immediate
- Complete Final LA notification Dec 31
- Complete negotiations and compensation award Feb 28
- Contract award of PMC for ITS Jan 15
- Submit proposal for additional GEF funds Dec 7
- Share revised ToR for Land Use and Transport Planning Consultancy based on comments provided/ Submit EoI shortlist and draft RFP Dec 7 / Jan 7
- Update on land availability and park land identification in the QPR December 2013
- Progress on discussions to develop Rayapur lake in the QPR December 2013
- Strengthening communications at HDBRTSCO Finalize project brochures for PIC and distribute them Immediate; Hire PRO Dec 31
- Link HDBRTS website to the SUTP website and create section for the new demo city and project on the SUTP website Immediate

#### Annex 7

#### **Financial Management**

- 1. The mission held discussions with officials of Naya Raipur and AICTSL at New Delhi and held discussions with PMU to review the adequacy of existing financial management arrangements. The broad discussions held are highlighted below:
  - a) Budgeting: The budgetary estimates for FY 14-15 have been proposed for inclusion in the State budget by all the PIU's. As evident from the past budgetary estimates provided by  $PMU^2$  below, the initial budget estimates are substantially higher than the actual expenditure. There is a need for mapping the anticipated activities with the procurement plan to ensure realistic budget projections.

INR/ Million

11 (1)	INC MILION					
PIU	BE FY 13- 14	RE FY 13-14	Actual expenditure till Sep 30 2013	% utilization of BE	% utilization of RE	Proposed BE FY 14- 15
	(A)	(B)	(C)	(C/A)	(C/B)	
NRDA	400.00	105.73	5.87	1.47%	5.56%	600.00
KSRTC	70.00	85.96	25.51	36.44%	29.68%	33.54
AICTSL	361.80	81.63	-	0.00%	0.00%	5.70
PCMC*	1491.80	616.50	446.85	29.95%	72.48%	585.00
MoUD	94.75	88.28	17.64	18.61%	19.98%	138.99
HDBRTS	442.20	442.20	19.48	4.40%	4.40%	2,837.20

<sup>\*</sup>Only includes estimates related to bank funded components. The entire project budget is sought from PCMC.

- b) External Audit: Timely submission (by September 30 2013) for the audit reports for all PIU's ie PCMC and Naya Raipur (IBRD and GEF) and MoUD, KSRTC and AICTSL (GEF) have been made to the Bank. The audit report requirement for HDBRTS will be effective from FY 13-14 onwards and the first audit report will be due by September 30 2014. The audit reports stands reviewed and Bank comments have been shared with the project vide the audit review letter. The PMU is requested to co-ordinate and ensure submission of audit response no later than January 31 2014.
- c) Disallowances: The auditors (AG ,Maharashtra) has held an amount of INR 211.39 million under objection under IBRD 7818 (highlighted below). Detailed discussions were held with finance staff of PCMC and a timeline of January 31 2014 has been agreed, beyond which these amounts will be declared as ineligible and will be deducted from future claims. PCMC has been requested to provide necessary explanations and documents to AG to regularize the expenditure and ensure recertification of same by January 31 2014.

<sup>&</sup>lt;sup>2</sup> The information on BE and RE for 2013-14 and BE for 14-15 compiled and provided by PMU.

	AUDIT OBJECTION LOAN -7818 (PCMC)						
Para No.							
5.	5. Excess payment made to contractor						
6.	Non-recovery of labour welfare cell	1,969,811					
7.	Payment of price variation without recording of measurement book with date	126,300,000					
	Total	211,386,801					

As regards the previous audit observation, recertification amounting to INR 0.23 million has been submitted by project along with the audit report for FY 12-13.

		USD Million				
Financing source	Allocation	Disbursement				
GEF	18.45	1.86				
DA Advance	-	2				
Total	18.45	3.86				
% Disbursed inc DA		20.92%				
% Disbursed exc		10.08%				
DA		10.06%				
*Excluding agency fees of US\$ 1.88 mn						

d) Financial progress: The financial progress of IBRD and GEF excluding DA advance stands at 15.07% and 10.08% respectively. The respective financial position on the basis of project related receipts is summarized below (workings as per Annexure 1). The project is in the process of submission of revised IUFR for quarter ending September 2013 which seeks an

amount of INR 109.36 million and INR 40.02 million against IBRD and GEF respectively as reimbursement. Due to advance procurement activities, an advance of USD 1 million each has been requested by HDBRTS and Naya Raipur.

		USD Million
Financing source	Allocation	Disbursement
IBRD	105.23	15.86
DA Advance	-	7.00
Total	105.23	22.86
% Disbursed inc DA		21.73%
% Disbursed exc DA		15.07%
	•	

- e) Reporting: The submission of IUFR is timely. The IUFR for quarter ended June 2013 stands disbursed. The project has now transitioned from half yearly to quarterly IUFR. The next IUFR for quarter ending September 2013 has been submitted to the Bank during the mission. The comments to it have been made available and the revised IUFR is expected to be submitted to Bank by November 25 2013.
- f) Accounting: The accounts for the project are maintained in TALLY software in all PIU's (except KSRTC where it is maintained in Oracle). At Hubli PIU, TALLY software stands procured chart of accounts have been created to capture project related expenditure.

g) Internal Audit: As informed by PMU, the internal audit has been concluded till quarter ending September 2013. It was informed that although these reports are being reviewed at PMU level and the discrepancies highlighted are resolved, the audit committee has not convened for the adoption of these reports since last three quarters. PMU is taking up this matter with the ministry and will appraise the Bank on the same.

# Overall rating:

Project rating: Financial Management					
Pimpri	MS				
Naya Raipur	MS				
Hubli	MS				
Mysore	S				
Indore	MS				
PMU – MoUD	MS				
Overall Project	MS				

Action points	By whom	By when
Copy of response from PCMC to AG on para raised in audit report for	PCMC and PMU	December 10 2013
FY 1314		
Copy of AICTSL request for budget provisioning to concerned	AICTSL and PMU	December 10 2013
department		
Copy of State budget provisioning PIU's share for FY 14-15	PMU	February 28 2014

# <u>APPENDIX 1</u> <u>Amount in INR/ Million</u>

# Position of total cost, receipts and expenditure till date

IBRD- PIU wise disbursement -Dec 19 2013								
PIU's	PCMC**	Naya Raipur	HDBRTS		front end	Total		
IBRD allocation *	35.58	13.94	55.45		0.26	105.23		
Designated advance	7	1	1			9.00		
Reimbursements	17.34	0.00	0.01		0.00	17.35		
Total Disbursements	24.34	1.00	1.01		0.26	26.61		
% Disbursed inc DA	68.41%	7.18%	1.82%		0.00%	25.29%		
% Disbursed exc DA	48.74%	0.00%	0.02%		0.00%	16.49%		
* Incl the front end fees of USD 0.263 mn  ** Incl unallocated amount of USD 5.70								

GEF- Dec 19 2013								USD Millic
PIU's	PCMC	Naya Raipur	Indore	KSRTC	MoUD	HDBRTS	Unallocared	Total
GEF allocation	1.9	1.9	1.9	1.9	7.05	1.9	1.9	18.45
Designated advance	0.46	0.23	0.23	0.23	0.85	0	0	2
Reimbursements	0.032	0.275	0.290	1.422	0.454	0.034	0.000	2.51
Total Disbursements	0.492	0.505	0.520	1.652	1.304	0.034	0.000	4.51
% Disbursed inc DA	25.88%	26.58%	27.37%	86.96%	18.50%	0.00%	0.00%	24.43%
% Disbursed exc DA	1.67%	14.47%	15.26%	74.86%	6.44%	0.00%	0.00%	13.59%
* Excluding the GEF agency fees of USD 1.88 mn								