



**GEF/WORLD BANK/UNDP
Sustainable Urban Transport Project, India**

**Project Information Document
Volume-2**

**Component-1:
National Capacity Development
Initiatives(Final)**

May 2009

**MINISTRY OF URBAN DEVELOPMENT
Government of India**

Project Preparatory Work Consultant: **LEA Associates South Asia Pvt. Ltd., New Delhi**

CONTENTS

EXECUTIVE SUMMARY	1
E.1 BACKGROUND.....	1
E.2 PURPOSE OF COMPONENT 1.....	1
E.3 IMPLEMENTATION ARRANGEMENTS.....	2
E.4 PROJECT IMPLEMENTATION PLAN.....	3
E.5 COSTS AND SOURCES OF FUNDING.....	3
E.6 FUND FLOW	4
Gol Funds.....	4
GEF – UNDP Funds.....	4
GEF – World Bank Funds.....	5
E.7 PROCUREMENTS	5
E.8 PROJECT MONITORING AND EVALUATION INDICATORS	6
CHAPTER 1. NATIONAL CAPACITY DEVELOPMENT INITIATIVES	1-1
1.1 BACKGROUND.....	1-1
1.2 PURPOSE OF COMPONENT 1.....	1-1
1.3 STRUCTURE OF THE REPORT	1-2
CHAPTER 2. PROJECT COMPONENTS.....	2-1
2.1 SUB-COMPONENT 1: INSTITUTIONAL CAPACITY DEVELOPMENT-STRENGTHENING THE IUT (INSTITUTE OF URBAN TRANSPORT)	2-1
2.2 SUB-COMPONENT 2: INDIVIDUAL CAPACITY DEVELOPMENT: TRAINING OF TRAINERS AND A GROUP OF PROFESSIONALS AT NATIONAL, STATE AND LOCAL LEVELS.....	2-3
2.3 SUB-COMPONENT 3: SELECTION AND PREPARATION OF MANUALS AND TOOLKITS	2-4
2.4 SUB-COMPONENT 4: PROMOTION, RAISING-AWARENESS, AND DISSEMINATION ACTIVITIES, TO EXPAND AND ENHANCE THE IMPACTS OF THE GEF-SUTP	2-6
2.5 SUB-COMPONENT 5: TECHNICAL ASSISTANCE TO CITIES TO ADDRESS EMERGING ISSUES ENCOUNTERED DURING PROJECT IMPLEMENTATION	2-6
CHAPTER 3. IMPLEMENTATION ARRANGEMENT AND PLAN	3-1
3.1 IMPLEMENTATION ARRANGEMENTS.....	3-1
3.1.1. Steering Committee.....	3-1
3.1.2. Project Management Unit (PMU).....	3-1
3.1.3. Project Consultants (PCs)	3-2
3.2 PROJECT IMPLEMENTATION PLAN.....	3-5
3.3 PROJECT EXIT STRATEGY	3-5
CHAPTER 4. COSTS AND SOURCES OF FUNDING	4-1
4.1 COSTS AND SOURCES OF FUNDING.....	4-1
4.2 FUND FLOW	4-2
4.2.1. Gol Funds.....	4-2
4.2.2. GEF – UNDP Funds.....	4-2
4.2.3. GEF – World Bank Funds.....	4-3
CHAPTER 5. PROCUREMENT PLAN.....	5-1
5.1 INTRODUCTION.....	5-1
5.2 PROCUREMENTS	5-1
5.3 PROCUREMENT PROCEDURE FOR LARGE CONSULTANCY SERVICES FUNDED BY GOI	5-2

5.4	PROCUREMENT SCHEDULE FOR LARGE CONSULTANCY SERVICES FUNDED BY GOI	5-3
5.5	PROCUREMENT OF GOODS AND SERVICES FUNDED BY UNDP	5-3
5.6	PROCUREMENT OF GOODS AND INDIVIDUAL SERVICES FUNDED BY GOI	5-3
CHAPTER 6.	MONITORING AND EVALUATION OF OUTCOMES	6-1
6.1	PERFORMANCE INDICATORS.....	6-1
6.2	M&E OF PROJECT IMPLEMENTATION	6-1
6.3	M&E OF PROJECT OUTCOMES	6-1
6.4	DATA COLLECTION AND REPORTING	6-2

LIST OF TABLES

Table 1: Sub-component Costs and Sources of Funding <i>(in USD millions)</i>	4
Table 2-1: Blocks and constituent Manual and Toolkits	2-5
Table 3-1: Work Plan for Sub-Component 4	3-3
Table 4-1: Costs and Sources of Funding for Component 1 <i>(in USD millions)</i>	4-1
Table 4-2: Sub-component Costs and Sources of Funding <i>(in USD millions)</i>	4-1
Table 5-1 Procurement for Component 1	5-1
Table 5-2: Procurement Plan for Hiring of PCs	5-2
Table 5-3: Procurement Schedule of PC.....	5-3
Table 6-1: Monitoring and Evaluation of Project Outcomes of Component 1	6-2

LIST OF FIGURES

Figure 1: Project Implementation Arrangement.....	3
Figure 3-1: Project Implementation Arrangement.....	3-1
Figure 3-2: Process for Accessing Technical Assistance for Project Implementation	3-5
Figure 3-3: Implementation plan for sub-components of Component 1.....	3-5
Figure 4-1a. GEF (UNDP) Funds	4-2

APPENDICES

Appendix 2.1: ToR for Land-Use and Transport: Macro Planning.....	1
Appendix 2.2: ToR for Environmental Considerations in Urban Transport Planning	4
Appendix 2.3: ToR for Strategic Environmental Assessment.....	6
Appendix 2.4: ToR for Sustainable Urban Transport Database Management	8
Appendix 2.5: ToR for Environmental Impact Assessment	11
Appendix 2.6: ToR for Pedestrian and Public Transport Friendly Site Planning	13
Appendix 2.7: ToR for Urban Street Design for Public and Non-Motorized Transport	15
Appendix 2.8: ToR for Traffic engineering for Public Transport	21
Appendix 2.9: ToR for Intelligent Transportation Systems for Public Transport	24
Appendix 2.10: ToR for Travel Demand Management	27
Appendix 3.1: ToR for Strengthening of IUT	31
Appendix 3.2: ToR for Training and Skill Development Programs	40
Appendix 3.3: ToR for Needs Assessment of Manuals and Tool kits.....	46
Appendix 3.4: ToR for Preparation of Manuals and Tool kits.....	51
Appendix 3.5: Outline Form for Problem Statements	56
APPENDIX 4.1: Cost Estimates for IUT Strengthening.....	57
APPENDIX 4.2: Cost Estimates for Training & Skill Development Program	58
APPENDIX 4.3A: Selection of Manual and Tool Kits	59
APPENDIX 4.3B: Preparation of Manual and Tool Kits.....	59
Appendix 5.1: Selection of Project Consultant for the proposed GEF/World Bank/UNDP - Sustainable Urban Transport Project, India	60
Appendix 5.2: Request for Proposal and Contract Format.....	62

List of Abbreviations

ADB	Asian Development Bank
APTS	Advanced Public Transportation Systems
ATC	Area Traffic Control
ATIS	Advanced Traveller Information Systems
ATMS	Advanced Traffic Management Systems
B. Tech.	Bachelors in Technology
CAAA	Controller of Aid Accounts & Audit
CCTV	Closed Circuit Television
CD	Compact Disc
CIRT	Central Institute of Road Transport
CSMC	Central Sanctioning and Monitoring Committee
CV	Curriculum Vitae
CVO	Commercial Vehicle Operations
DEA	Directorate of Economic Affairs
DFID	Department for International Development
DSS	Decision Support System
DVD	Digital Video Disc
EA	Environmental Assessments
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
Eoi	Expression of Interest
FBS	Fixed Budget Selection
FTP	Full Technical Proposal
GC	General Conditions
GEF	Global Environment Facility
GFR	General Financial Rules
GHG	Greenhouse Gases
GIS	Geographical Information System
GoI	Government of India
GPS	Global Positioning System
GRH	Guaranteed Ride Home
GT	Green Transport
HOV	High Occupancy Vehicle
IAS	Implementing Agencies
IBRD	The International Bank for Reconstruction and Development
IDA	International Development Association
ITS	Intelligent Transport Systems
IUT	Institute of Urban Transport
KMC	Knowledge Management Centre
LIBOR	London Inter-Bank On-Lending Rate
Lol	Letter of Invitation
M & E	Monitoring and Evaluation

MCA	Masters in Computer Application
MoEF	Ministry of Environment and Forest
MOUD	Ministry of Urban Development
MRTS	Mass Rapid Transit System
NMT	Non-Motorized Transport
NMV	Non-Motorized Vehicle
NPD	National Project Director
NUTIC	National Urban Transport Information Centre
NUTP	National Urban Transport Policy
OP	Operational Policy
OSD	Officer on Special Duty
PC	Project Consultant
PDA	Personal Digital Assistant
PDO	Project Development Objective
PID	Project Information Document
PMC	Project Management Consultant
PMU	Project Management Unit
PWD	Public Works Department
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
R & D	Research and Development
RAP	Resettlement Action Plan
RFP	Request for Proposal
RoM	Read only Memory
RTO	Regional Transport Officer
SBI	State Bank of India
SC	Special Conditions
SCC	Special Conditions of Contract
SEA	Strategic Environmental Assessment
SIA	Social Impact Assessment
STP	Simplified Technical Proposal
SUTP	Sustainable Urban Transport Project
SUV	Sports Utility Vehicle
TA	Technical Assistance
TCPO	Town and Country Planning Organization
TDM	Travel Demand Management
TERI	The Energy Research Institute
TNA	Training Needs Assessment
ToR	Terms of Reference
UD	Urban Development
UMTA	Unified Metropolitan Transport Authority
UNCITRAL	United Nations Commission on International Trade Law
UNDP	United Nations Development Programme
USD	United States Dollar
VEC	Valued Environmental Components
WB	World Bank

Executive Summary

The Project Information Document (PID) prepared for component 1 of the GEF-SUTP details out the purpose for inclusion of the component into the project, its objectives, sub-components, implementation arrangements, costs and funding plan. A set of project monitoring and evaluation indicators have also been developed to monitor the outcomes of the project.

E.1 BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The twin objectives of SUTP India are;

- i) To strengthen capacity of GoI, and participating states and cities in planning, financing, implementing, operating and managing sustainable urban transport systems; and
- ii) To assist states and cities in preparing and implementing demonstration "Green Transport" projects.

These objectives are to be achieved through the implementation of following three components.

- The first component is targeted towards National Capacity Development in Urban Transport has a fund allocation of USD 10.15 Million;
- The second component is meant for implementing environment friendly urban transport demonstration projects in participating cities has a total project cost of about USD 300 Million; and
- The third component is to strengthen the overall project management capability of the nodal agency responsible for implementing the SUTP for which an allocation of USD 2.45 Million has been made.

E.2 PURPOSE OF COMPONENT 1

Environment friendly urban transport is a necessity for a sustainable urban environment. This concept needs to be incorporated into all aspects of urban transportation namely policy, planning, implementation, operations and management. GoI through the MoUD intends to take the initiative to launch this process as a supplement to the NUTP and Component 1 of SUTP is expected to provide the necessary means for doing so.

The primary objective of the National Capacity Development Initiatives under the SUTP is to create an enabling institutional framework for sustainable urban transport in India by institutionalizing environmental principles in urban transport policy, planning, implementation, operations and management. This is to be accomplished by:

- i. Initiating, building and consolidating a strong and functional long-term partnership between GoI and states/local governments for sustainable urban transport development;
- ii. Enhancing the capacity of policymakers, planners, researchers, executive agencies, service providers, managers and other professionals involved with urban transport to plan, implement, operate and manage sustainable urban transport systems; and

- iii. Providing necessary infrastructure to create a national resource centre for urban transport which would facilitate knowledge and information exchange.

The objective of National Capacity Development Initiative under GEF-SUTP is to be achieved through the implementation of the following five subcomponents:

One of the key objectives of the National Urban Transport Policy, 2006 for India is to build capacity (institutional and manpower) to plan for sustainable urban transport and to establish a national resource centre that would serve the needs of all urban transport professionals, such as planners, researchers, teachers, trainers, students, etc. For this purpose IUT an existing institute under the purview of the MoUD, GoI has been identified to be suitably strengthened to discharge this responsibility.

- **Sub-Component 1:** Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);
- **Sub-Component 2:** Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;
- **Sub-Component 3:** Selection and preparation of Manuals and Toolkits; This subcomponent is subdivided into two parts namely:
 - 3a. Needs assessment and identification of Manuals and Toolkits; and
 - 3b. Preparation of Manuals and Toolkits
- **Sub-Component 4:** Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and
- **Sub-Component 5:** Technical assistance to cities to address emerging issues encountered during project implementation.

E.3 IMPLEMENTATION ARRANGEMENTS

The project implementation and management structure for facilitating and ensuring smooth and effective implementation of the project, including the Component-1 is given in Figure 1.

A Project Steering Committee under the chairmanship of the Secretary, MoUD, GoI has been constituted and consists of members from MoEF, DEA, MoUD. Representatives from the World Bank and UNDP may be invited to these meetings as and when required. The Steering Committee would be the approving authority for all policies and executive decisions and would provide overall direction and guidance to the national and city level implementing agencies.

The MoUD is the nodal ministry for implementing the SUTP on behalf of the Government of India. The SUTP is to be managed by a dedicated Project Management Unit (PMU) constituted by the MoUD. This would be the executive agency of the MoUD. The PMU will provide technical assistance to MoUD in planning, preparation, procurement, fund management and reporting required for component 1.

PMU will be headed by a National Project Director (NPD) who will be an Officer of MoUD. The NPD would be assisted by a National Project Manager (NPM) who would be an interface between PMU and various committees of the government like the advisory, steering, standing committee etc. The National Project Manager will be assisted by other professionals and staff, including Finance and Accounts Specialist, Transport Specialist and other support staff.

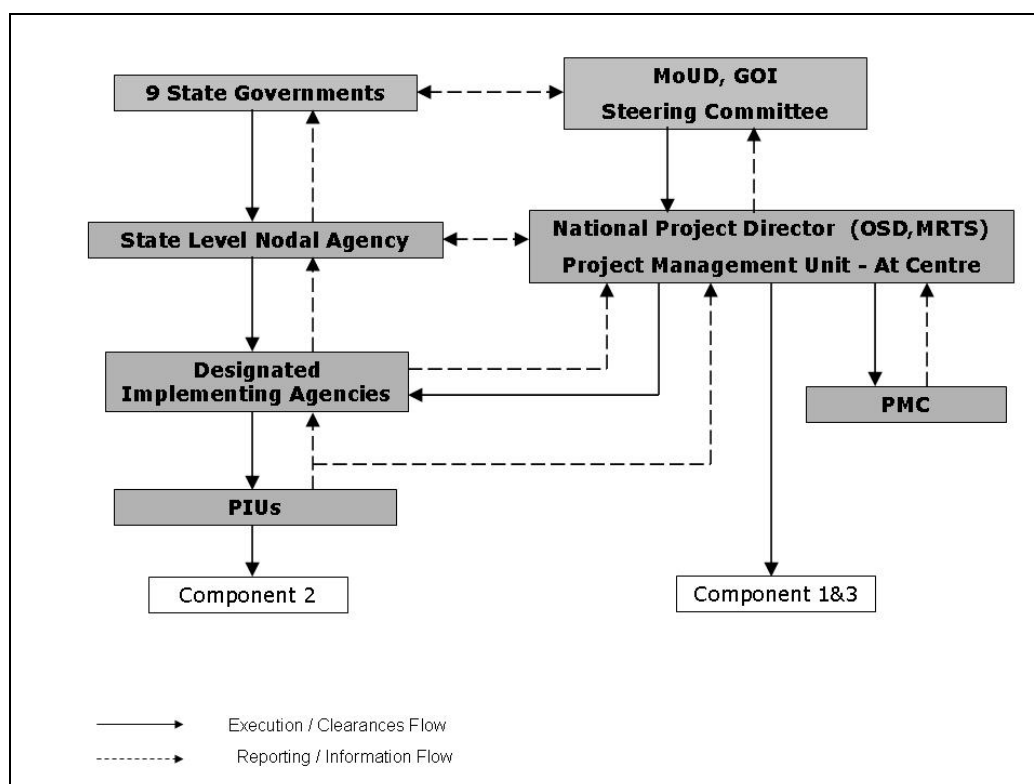


Figure 1: Project Implementation Arrangement

The MoUD plans to augment the PMU’s capacity by appointing a Project Management Consultant (PMC) to assist the PMU in all matters concerning project monitoring and management. In addition to the PMC, the PMU would also procure the services of Project Consultants (PCs) to assist them in the task of preparing and implementing the sub-components of component-1. The ToRs and scope of work for all the PCs have been outlined in Appendix 3.

E.4 PROJECT IMPLEMENTATION PLAN

Based on the detailed scope of work under each sub-component an implementation plan has been prepared (Refer Fig: 3.3 of Chapter3). After the completion of the consultancy services for sub-component 1 the IUT/ PMU will take over the implementation of the project.

E.5 COSTS AND SOURCES OF FUNDING

The estimated cost of planning, organizing and implementing the activities and sub-tasks of Component 1 is equivalent to USD 15.2 million as shown in the Table-1. Funds for undertaking activities under the component 1 will be sourced from three agencies namely, GoI, GEF (UNDP) and GEF (World Bank).

Table 1: Sub-component Costs and Sources of Funding (in USD millions)

No.	Sub-Component	GEF (UNDP)	GEF (WB)	GOI	Total
1	Strengthening of IUT	1.62	0	2.27	3.89
2	Training and Skill Development Programs	1.44	0	0.80	2.24
3	a) Needs Assessment of Manuals and Tool kits	0.25	0	0	0.25
	b) Preparation of Manuals and Tool kits	0.00	0	1.36	1.36
4	Promotion, raising-awareness, and dissemination activities	0.2	0	0	0.20
5	Technical assistance to cities to address emerging issues encountered during project implementation	0	6.4	0.7	7.1
6	Contingency	0.08	0	0.08	0.16
	Total	3.60	6.4	5.20	15.2

The sub-component wise detailed cost break up has also been worked out and given as part of Appendix 4.

E.6 FUND FLOW

The Figure 2 shows the fund flow mechanism to be followed for accessing funds from the various agencies.

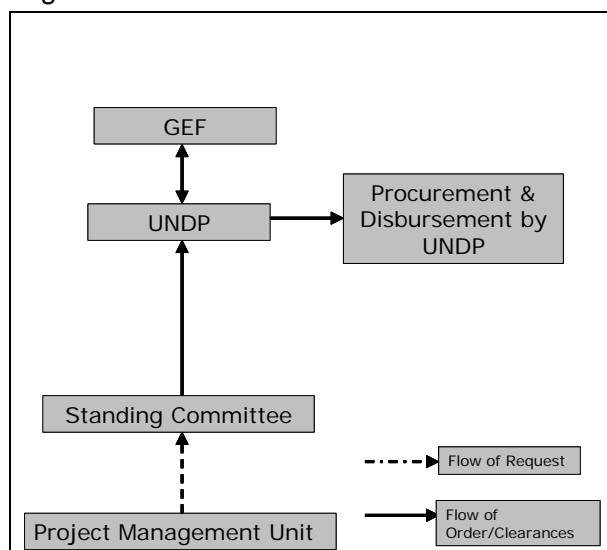


Figure 2a. GEF (UNDP) Funds

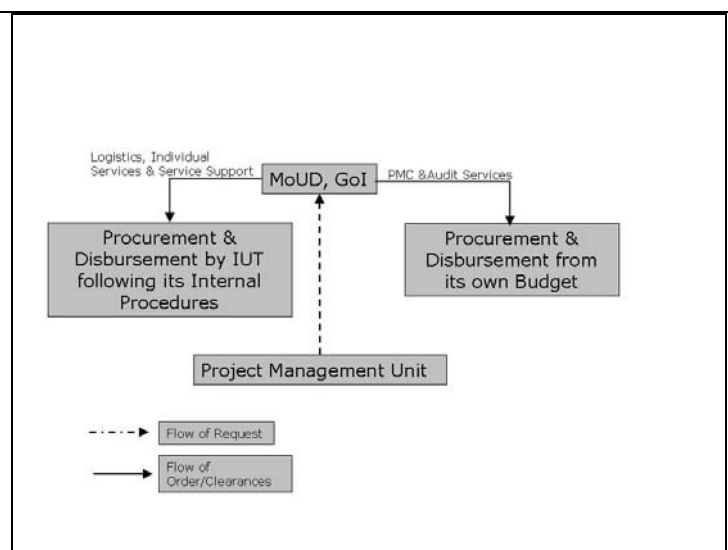


Figure 2b. GoI Funds

GoI Funds

As shown in Figure 2a, to access the GoI funds the PMU will send a request to the MoUD. The MoUD will directly undertake procurement and disbursement for the PMC and Audit Services from its own allocated budget as per its own guidelines. The GOI will disburse funds to IUT for all other services and expenditures.

GEF – UNDP Funds

A Standing Committee under the chairmanship of the NPD has been set up for activities for which the UNDP is the funding agency. As shown in Figure 2b, the PMU will submit the request for funds to this committee. The committee will decide upon the request and after its approval the request will be forwarded to the UNDP. UNDP will then carry out the requested procurement and disbursement activities as per its prescribed guidelines and seek the funds directly from GEF.

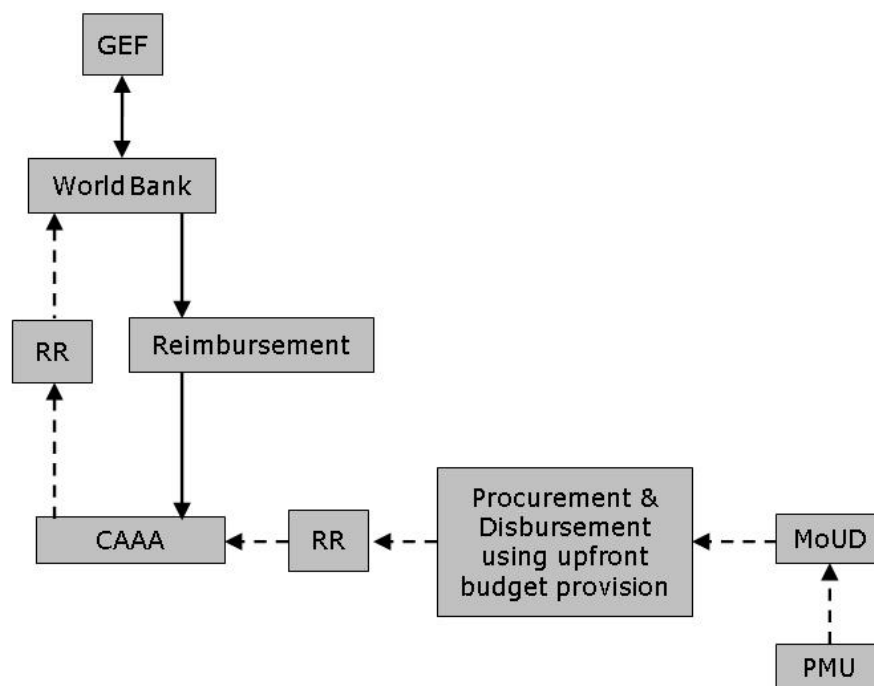


Figure 2c. GEF– World Bank Funds

GEF – World Bank Funds

The GEF grant for sub-component 5 is to be sourced through World Bank. As indicated in Figure 2c, the PMU will submit a request to the MoUD to undertake a specific activity. The MoUD will carry out the procurement and disbursements as per its prescribed guidelines using the upfront budget provision created for the project. It will then submit a request for reimbursement against the expenditure incurred to CAAA, which in turn will put it up to the World Bank. After review, the Bank will reimburse the amount to CAAA, which in turn will reimburse it to MoUD. The World Bank will seek funds directly from GEF.

E.7 PROCUREMENTS

Table 2 gives the expected list of goods and services which need to be procured for planning and implementing Component 1. As these procurements are to be funded by either the GOI or the UNDP or the World Bank, the respective procurement procedures are to be adopted.

Table 2: Procurements for Component 1

Procurements		Type of Procurement	Source of Funding	Procurement Procedure
Sub-component 1 : Strengthening of IUT				
1	Project Consultant 1	Services	GOI	GOI
2	KMC Staff	Services	UNDP	UNDP
3	KMC Equipments	Goods	UNDP	UNDP
4	KMC Establishment	Logistics	GOI	IUT
5	Publications Staff	Services	UNDP	UNDP
6	Publications Materials	Goods	UNDP	UNDP
7	Publication Establishment	Logistics	UNDP	UNDP
8	Research Staff	Services	UNDP	UNDP
9	Research Materials	Goods	UNDP	UNDP
10	Research Establishment	Logistics	UNDP	UNDP
Sub-component 2 : Training and Individual Capacity Building				

Procurements		Type of Procurement	Source of Funding	Procurement Procedure
1	Project Consultant 2	Services	GOI	GOI
2	Training Programs	Services	UNDP	UNDP
3	Training / Workshop Division at IUT	Services	UNDP	UNDP
Sub-component 3 : Manuals and Toolkits				
1	Project Consultant 3A	Services	UNDP	UNDP
2	Project Consultant 3B	Services	GOI	GOI
3	Training Materials Printing Cost of 1000 Manuals	Goods	GOI	GOI
Subcomponent 4 : Publicity and Awareness Campaigns				
1	Appointment of Agencies	Services	UNDP	UNDP
TA's to resolve issues during Project Implementation				
1	Research and Report	Services	WB & GOI	WB & GOI

Procurement of goods and services funded by UNDP shall be undertaken by UNDP on receipt of recommendations from the Standing Committee. The ToRS, EOI and RFP for hiring the consultants have been given as part of Appendix 3 and 5 respectively.

Procurement of Goods, office furnishings, equipments and individual services, required by IUT to provide logistic and other service support to PMU, shall be undertaken by IUT following its internal procedures, with funds to be provided by MoUD.

E.8 PROJECT MONITORING AND EVALUATION INDICATORS

The PMC will assist the PMU to monitor and evaluate the outcomes of the project. An indicative list of parameters for monitoring the outcomes of component 1 of SUTP, the data collection method and frequency of collection has been drawn and given in Table 6.1 of chapter 6. The PMU would finally specify how, where and when baseline and time series data is to be collected, collated, analyzed and presented.

LIST of APPENDICES

Appendix 2.1: ToR for Land-Use and Transport: Macro Planning.....	1
Appendix 2.2: ToR for Environmental Considerations in Urban Transport Planning.....	4
Appendix 2.3: ToR for Strategic Environmental Assessment.....	6
Appendix 2.4: ToR for Sustainable Urban Transport Database Management	8
Appendix 2.5: ToR for Environmental Impact Assessment	11
Appendix 2.6: ToR for Pedestrian and Public Transport Friendly Site Planning	13
Appendix 2.7: ToR for Urban Street Design for Public and Non-Motorized Transport	15
Appendix 2.8: ToR for Traffic engineering for Public Transport	21
Appendix 2.9: ToR for Intelligent Transportation Systems for Public Transport.....	24
Appendix 2.10: ToR for Travel Demand Management.....	27
Appendix 3.1: ToR for Strengthening of IUT	31
Appendix 3.2: ToR for Training and Skill Development Programs	40
Appendix 3.3: ToR for Needs Assessment of Manuals and Tool kits.....	46
Appendix 3.4: ToR for Preparation of Manuals and Tool kits.....	51
Appendix 3.5: Outline Form for Problem Statements.....	56
APPENDIX 4.1: Cost Estimates for IUT Strengthening.....	57
APPENDIX 4.2: Cost Estimates for Training & Skill Development Program	58
APPENDIX 4.3A: Selection of Manual and Tool Kits	59
APPENDIX 4.3B: Preparation of Manual and Tool Kits.....	59
Appendix 5.1: Selection of Project Consultant for the proposed GEF/World Bank/UNDP - Sustainable Urban Transport Project, India.....	60
Appendix 5.2: Request for Proposal and Contract Format.....	62

Chapter 1. National Capacity Development Initiatives

1.1 BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The twin objectives of SUTP India are;

- i) To strengthen capacity of GoI, and participating states and cities in planning, financing, implementing, operating and managing sustainable urban transport systems; and
- ii) To assist states and cities in preparing and implementing demonstration "Green Transport" projects.

These objectives are to be achieved through the implementation of following three components.

- The first component targeted towards National Capacity Development in Urban Transport has a fund allocation of USD 15.2 Million.
- The second component meant for implementing environment friendly urban transport demonstration projects in participating cities has a total project cost of about USD 300 Million.
- The third component is to strengthen the overall project management capability of the nodal agency responsible for implementing the SUTP for which an allocation of USD 2.45 Million has been made. Ministry of Urban Development (MoUD), GoI has been designated as the nodal agency on behalf of the GOI to implement the SUTP. Therefore, the MoUD has to manage and implement all the three components of SUTP.

1.2 PURPOSE OF COMPONENT 1

Environment friendly urban transport is a necessity for a sustainable urban environment. This concept needs to be incorporated into all aspects of urban transportation namely policy, planning, implementation, operations and management. Institutions all over the country dealing with such of these aspects of urban transportation need to be enlisted into adopting this concept. GoI through the MoUD intends to take the initiative to launch this process as a supplement to the NUTP and Component 1 of SUTP is expected to provide the necessary means for doing so.

The primary objective of the National Capacity Development Initiatives under the SUTP is to create an enabling institutional framework for sustainable urban transport in India by institutionalizing environmental principles in urban transport policy, planning, implementation, operations and management. This is to be accomplished by:

- i) Initiating, building and consolidating a strong and functional long-term partnership between GoI and states/local governments for sustainable urban transport development;
- ii) Enhancing the capacity of policymakers, planners, researchers, executive agencies, service providers, trainers, managers and other professionals involved with urban transport to plan, implement, operate and manage sustainable urban transport systems; and

- iii) Providing necessary infrastructure to create a national resource centre for urban transport which would facilitate knowledge and information exchange.

1.3 STRUCTURE OF THE REPORT

Chapters 1 and 2 detail the objectives and the sub-components of the national capacity development initiatives. The implementation arrangement and plan have been discussed in the Chapter 3. The procurement plan and guidelines for the procurement of required professionals and consulting services have been presented in Chapter 4. The cost and the funding arrangements are discussed in Chapter 5. Monitoring and evaluation framework for project implementation and its outcomes are discussed in Chapter 6.

A set of appendices including ToRs for Institutional and Individual Capacity Building, Expression of Interests (EoIs) for the Project Consultants (PCs) and Request for Proposal (RFP) have also been included as part of the document.

Chapter 2. Project Components

The objective of National Capacity Development Initiative under GEF-SUTP is to be achieved through the implementation of the following five subcomponents:

- **Sub-Component 1:** Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);
- **Sub-Component 2:** Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;
- **Sub-Component 3:** Selection and preparation of Manuals and Toolkits; This subcomponent is subdivided into two parts namely:
 - **3a.** Needs assessment and identification of Manuals and Toolkits; and
 - **3b.** Preparation of Manuals and Toolkits
- **Sub-Component 4:** Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and
- **Sub-Component 5:** Technical assistance to cities to address emerging issues encountered during project implementation.

2.1 SUB-COMPONENT 1: INSTITUTIONAL CAPACITY DEVELOPMENT-STRENGTHENING THE IUT (INSTITUTE OF URBAN TRANSPORT)

One of the key objectives of the National Urban Transport Policy, 2006 for India is to build capacity (institutional and manpower) to plan for sustainable urban transport and to establish a national resource centre that would serve the needs of all urban transport professionals, such as planners, researchers, teachers, students, etc. For this purpose IUT an existing institute under the purview of the MoUD, GoI has been identified to be suitably strengthened to discharge this responsibility.

Institute of Urban Transport (IUT) was established in May, 1997 as a premier professional non-profit organization. It has been registered under the Societies Registration Act. It is an umbrella institution for research and development studies on Urban Transport with membership comprising Academicians, Architects, Economists, Engineers, Transport Planners, Town Planners and professionals from various disciplines. The institute has over 1000 Individual Members, 70 Associate Members and 50 Institutional Members. The Secretary, Ministry of Urban Development, Government of India is the ex-officio President of the Institute. Its Governing Council has members from various premier organizations connected with Urban Transport. The institute is currently being managed by a small team of staff headed by an Executive Secretary and is housed in the NBO building in Nirman Bhawan, New Delhi.

Objectives of IUT

The aim and objective of the institute is to promote, encourage and coordinate the state of art of urban transport including planning, design, development, operation, education, research and management and also to disseminate state of art information and knowledge through lectures, seminars, workshops, conferences, etc. and be the focal point in the country for professionals, decision makers, technology providers, operators and researchers.

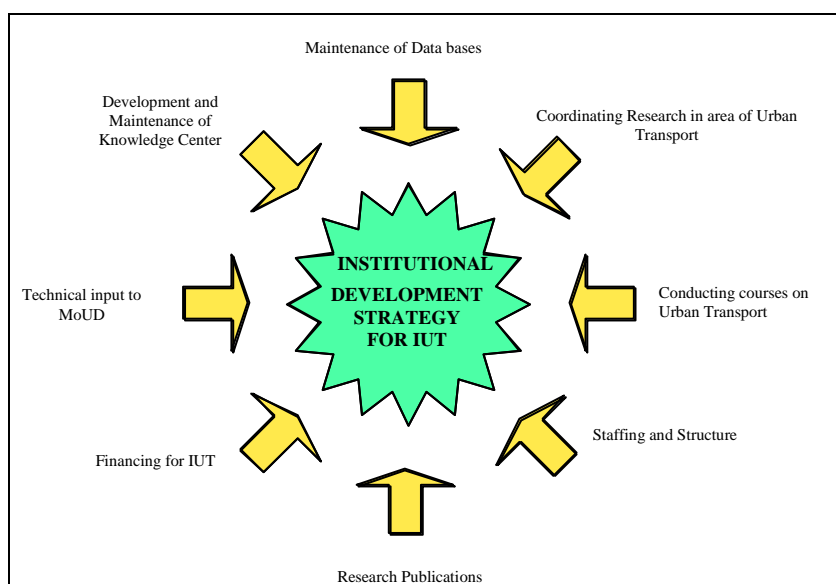
Main Activities of IUT

- Maintenance of data base and knowledge center on urban transport for policy and planning decision support.
- Coordinating research and advisory services in the area of urban transport in India
- Providing technical inputs to the Ministry of Urban Development in matters related to urban transport
- Provide technical advice and consultancy services to the State Governments, Local Governments and other agencies on a fee basis.

Vision for IUT

IUT would be built up to serve as a national level facility to provide continuous advice and guidance on good practices for urban transport planning, implementation, operations and management as emerging from national and international practices and research. It would also advise implementing agencies on new technologies as it becomes available for practical applications. It would take on the responsibility of disseminating this information to practicing professionals and managers through continuing training and education programs. It would act as a centre for institutional and professional accreditation and provide technical assistance to any or all organizations involved with urban transport in India. For this purpose, the institute would have to become a store house of information on the all aspects of urban transport and a comprehensive repository of the best practices in the field.

Main tasks envisaged for strengthening of IUT would be to augment and strengthen the institute's functions, increase and build capacity and make it sustainable. Figure below illustrates the various functions envisaged for IUT. The institutional strengthening and capacity building requirements need to be addressed for achieving this.



To detail out these requirements, a Business Plan needs to be prepared in the first stage which should address, but not necessarily be limited to the following aspects:

- Assessment and estimation of the manpower and infrastructure requirements of the IUT;
- Creation and maintenance of a Knowledge Management Center, consisting of National Urban Transport Information Centre (NUTIC) and a library with a publishing wing;
- Building research capabilities;
- Setting up Training and Capacity Building Activities;

- Making IUT a national centre for education in Urban Transport;
- Providing a Platform for Sharing and Dissemination of Information; and
- Prepare a sustainable financial plan for the IUT.
- Based on the suggestions given in the Business Plan, the IUT will undertake to implement with emphasis on the following:
 - Set up a fully functional NUTIC, library and publishing Wing;
 - Setup a research wing and ;
 - Design and publish journal and newsletter;
 - Review and update the Memorandum of Association of IUT; and
 - Undertake procurement of the manpower and infrastructure required for this subcomponent

A Knowledge Management Centre (KMC) is proposed to be a part of this component. The need for such a centre has arisen as transport policies and research are a data-driven process. Currently there is a lack of consistency, compatibility and comprehensiveness in data structures, due to the complexity in compilation of transport related data which is attributable to the variety of data types and multiplicity of data sources. The data which come from a variety of sources have to be integrated in a way that satisfies the needs of transport planning, modelling, evaluation and policymaking. With changing requirements and expectations, newer issues surface and these need to be studied and researched. The KMC is expected to identify problem areas and identify relevant subject areas for meaningful research and policy formulation. As part of the KMC an internet portal is to be developed for sharing relevant data and information between professionals and organizations operating in the area of urban transport.

The KMC is to be set up along the lines suggested in the detailed project report prepared by CIRT for establishing the NUTIC at the IUT. The report details the need for such a centre, its composition, infrastructure, hardware and software requirements and also budgetary cost of the hardware and software. In order to implement this sub-component it is proposed to hire a consultant (PC1) who will be required to prepare the business plan and to assist the PMU in its implementation.

2.2 SUB-COMPONENT 2: INDIVIDUAL CAPACITY DEVELOPMENT: TRAINING OF TRAINERS AND A GROUP OF PROFESSIONALS AT NATIONAL, STATE AND LOCAL LEVELS

Individual capacity building aims to target professionals across all levels and roles in the urban transport sector. Knowledge, skills, aptitudes and attitudes of individuals have an impact on the overall qualitative and quantitative output of institutions. Properly designed training programs enhance the professional's capacity to deliver more effectively and efficiently. Training also helps bring in new information and procedures into the organization thereby expanding the capacity of the organization.

Under this sub-component, the IUT is required to initiate capacity development programs among about 1000 planners, decision makers and transport professionals at national, state, and local government levels. Some of the relevant training programs have been identified in the Training Needs Assessment (TNA) in the area of urban transport planning prepared by The Energy Resources Institute (TERI). Design of the modules/training materials/toolkits relevant to the topics suggested in the TERI report needs to be undertaken. Partnerships need to be formed

with other professional transport organizations, universities and colleges, and institutions to enable such outreach training programs

Hence, this sub-component aims to create awareness and institutionalize sustainable transportation planning through creation and implementation of focused training and skills development programs. To assist the PMU in the preparation and implementation of this subcomponent, the services of a Project Consultant (PC2) is to be procured by the PMU. The consultant will undertake training of 500-600 professional during the consultancy period.

2.3 SUB-COMPONENT 3: SELECTION AND PREPARATION OF MANUALS AND TOOLKITS

This sub - component aims to replicate the interventions suggested in manuals prepared in all the emerging cities and fast growing towns to achieve sustainable urban transport through preparation of a total of 10 manuals emphasizing energy efficient modes of transport. These manuals, standards, and toolkits will be prepared as part of implementing NUTP. As part of GEF-SUTP program, the required manuals have been grouped into the 4 blocks according to the different categories of planning/design activities and different users.

One of the objectives of SUTP being adoption of energy efficient modes of transport in the present urban scenario, integration of environmental concerns in the project conceptualization stage would eliminate any major environmental impacts that may arise in the implementation of proposals. The manuals are expected to provide guidelines for higher level of planning decisions such as implementation of zoning types, creation of policies, access management etc. for an urban region that is involved with huge transportation demand and strategic environmental assessment that would render urban transport sector environmentally safe in specific context to Indian conditions.

These manuals will complement the other set of manuals already being developed for capacity development initiatives under other projects.

SUB-COMPONENT 3A: Needs assessment and identification of Manuals and Toolkits

In order to prepare manuals/toolkits on sustainable urban transport suited to Indian context, a needs assessment is required. This is to be done by reviewing the available manuals/toolkits in the field of urban transport, inclusive of those being prepared under other projects, material already available internationally and identify the subject areas in which there are no manuals/standards/tool kits available for Indian cities. This would avoid the possibility of duplication of already available materials.

Based on preliminary group discussions and review of on-going and existing urban transport manuals that are funded by different multi-lateral and bi-lateral funding agencies such as Asian Development Bank (ADB), Department for International Development (DFID) and World Bank., about 10 manuals and toolkits oriented towards energy efficient modes of sustainable urban transport have been proposed for development to complement those toolkits and manuals already being developed under other projects. The manuals should also take into consideration gender and inclusion assessments. These manuals have been grouped into 4 broad blocks according to the different stages and categories of planning/ design activities and different users. The various blocks and the suggested manuals and tool kits in each have been listed in the **Table 2-1**.

Table 2-1: Blocks and constituent Manual and Toolkits

BLOCKS	MANUALS & TOOL KITS
<p>Block 1: Comprehensive Mobility Planning</p>	<ol style="list-style-type: none"> 1. Land-use and Transport: Macro Planning: This manual will deal with the higher level of planning decisions such as implementation of zoning types, creation of policies, access management etc. for an urban region that features huge transportation demand. 2. Environmental Considerations in Urban Transport Planning: As one of the objectives of SUTP is adoption of energy efficient modes of transport in the present urban scenario, various alternatives are to be explored and proposed as part of the SUTP. Integration of environmental concerns in the project conceptualization stage would eliminate major environmental effects that may arise later in the course of implementation of proposals. This manual will recommend various environmental guidelines for urban transportation along with policy level decisions that may be necessary at the conceptualization stage. 3. Strategic Environmental Assessment: The manual would address related aspects of sustainable transport policy and planning options to render urban transport sector environmentally safe in the specific context of Indian conditions. It would also suggest appropriate tools for decision-making to contribute to establishing an environmentally friendly and sustainable integrated context for the development of policies and plans.
<p>Block 2: Detailed Project Reports</p>	<ol style="list-style-type: none"> 4. Sustainable Urban Transport Data Collection and Management: The manual for the operation and maintenance of urban transport would suggest various service, revenue, and financial characteristics to present a clear view of state of transit. A clear and adaptable data maintenance structure will also be dealt with in the manual. 5. Environmental Impact Assessment: The EIA assists project managers and leaders in policy & planning to undertake decisions on implementation of a particular sub-project or take corrective actions towards control / mitigation of impacts. The manual will recommend incorporating decision making tools at plan preparation level and the scope of application for Project EIAs for identified sub-projects in the SUTP. The EIA manual so prepared would also take into account the environmental policies and regulations of multilateral funding agencies of the project.
<p>Block 3: Planning and Design</p>	<ol style="list-style-type: none"> 6. Pedestrian-friendly and Public Transport-friendly Site Planning: The aim of preparing the manual is to control the density of urban development through site planning, such that the demand for transport is limited to the capacity of the public transport system. Hence, the manual will cover the aspects that incorporate public transport with an ease in land use applications like, land use plan, transit design, driveway design, and related alternative measures. 7. Urban Street Design for Promoting Public and Non-Motorized Transport: The manual will outline guidelines to be used for planning and designing streets to ensure a process that clearly, consistently, and comprehensively considers the needs of pedestrians, bicyclists, and other Non Motorized Vehicles (NMVs).
<p>Block 4: Operations Management</p>	<ol style="list-style-type: none"> 8. Traffic Engineering for Public Transport: This manual is envisaged to identify and implement improvement measures to optimize existing transport facilities resulting in improved accessibility and mobility with satisfactory level of safety. Hence it should include aspects such as regulatory techniques, traffic control devices, traffic segregation techniques, demand management techniques, etc. 9. Intelligent Transport System (ITS) for Public Transport: This manual aims at bridging the gap between transportation and system engineering in urban areas and also area traffic control through ITS. It will cover ITS related aspects such as ITS design, ITS procurement strategies, Area Traffic Control system, Fleet management, etc. 10. Travel Demand Management: The manual will be prepared to give policymakers and other stakeholders a basic understanding of TDM programs and useful tools for TDM implementation in different conditions to meet various operations. Further, this manual will cover the TDM aspects such as travel information services, employer programs, parking measures, etc.

The ToRs for the preparation of these 10 manuals are presented in Appendix 2.1 to 2.10. These are to be reviewed during the needs assessment phase. To assist the PMU in undertaking the needs assessment, services of a Project Consultant (PC-3A) are to be procured by the PMU.

Sub-Component 3B: Preparation of Manuals, Standards and Tool Kits

Based on the revised ToRs prepared in the needs assessment phase (sub-component 3A), preparation of manuals will be taken up by a Project Consultant (PC-3B). The identified manuals, standards, and toolkits will be prepared as interactive softcopies for use of IUT. They will also

prepare necessary training materials and initiate training programs before handing over these activities to IUT.

2.4 SUB-COMPONENT 4: PROMOTION, RAISING-AWARENESS, AND DISSEMINATION ACTIVITIES, TO EXPAND AND ENHANCE THE IMPACTS OF THE GEF-SUTP

The main purpose of this project is to promote sustainable urban transport, including energy-efficient transport development and travel behaviour. Promotion and awareness campaigns highlighting the successful initiatives and outcomes of GEF SUTP are to be undertaken by the PMU in many towns and cities in India. This sub-component will include activities, such as developing a SUTP website, organizing promotion campaigns, dissemination and experience sharing workshops, newsletters etc.

2.5 SUB-COMPONENT 5: TECHNICAL ASSISTANCE TO CITIES TO ADDRESS EMERGING ISSUES ENCOUNTERED DURING PROJECT IMPLEMENTATION

Many cities planning to implement green transport projects, would be undertaking such projects probably for the first time. Without past experience in such projects, certain unanticipated issues could emerge during project implementation. To help the cities address such issues, the PMU intends to provide technical assistance to cities under this subcomponent.

Chapter 3. Implementation Arrangement and Plan

This chapter outlines the implementation arrangements and plan proposed for the implementation of the National Capacity Development Initiative under GEF-SUTP.

3.1 IMPLEMENTATION ARRANGEMENTS

The project implementation and management structure for facilitating and ensuring smooth and effective implementation of the project, including the Component-1 is given in **Figure 3-1**.

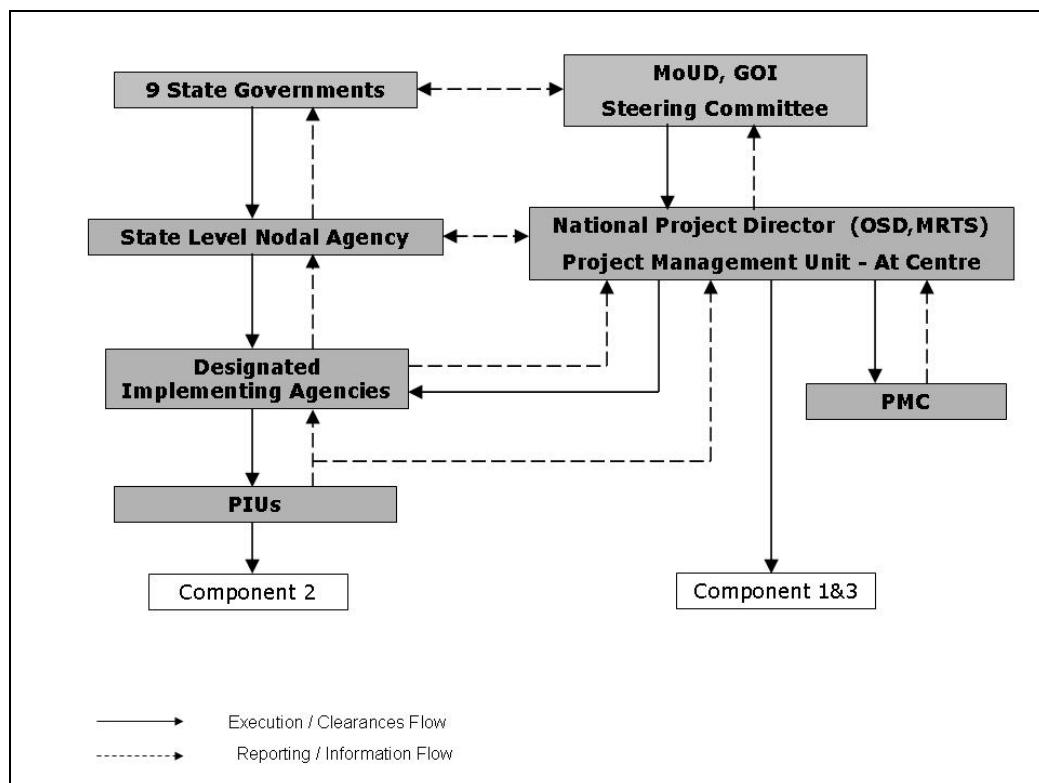


Figure 3-1: Project Implementation Arrangement

3.1.1. Steering Committee

A Project Steering Committee under the chairmanship of the Secretary, MoUD, GoI has been constituted and consists of members from MoEF, DEA, MoUD. Representatives from the World Bank and UNDP may be invited to these meetings as and when required. The Steering Committee would be the approving authority for all policies and executive decisions. It would provide overall direction and guidance to the national and city level implementing agencies, and also monitor the progress of the project.

3.1.2. Project Management Unit (PMU)

The Ministry of Urban Development (MoUD) is the nodal ministry for implementing the SUTP on behalf of the Government of India. The SUTP is to be managed by a dedicated Project Management Unit (PMU) constituted by the MoUD. This would be the executive agency of the MoUD which would operate under the overall direction and guidance of the Steering Committee.

The PMU will provide technical assistance to MoUD in planning, preparation, procurement, fund management and reporting required for component 1.

PMU will be headed by a National Project Director (NPD) who will be an Officer of MoUD. The NPD would be assisted by a National Project Manager (NPM) who would be an interface between PMU and various committees of the government like the advisory, steering, standing committee etc. The National Project Manager will be assisted by other professionals and staff, including:

- Finance and Accounts Specialist
- Transport Specialist
- Support Staff

In order to effectively function as the PMU, the MoUD plans to augment the PMU's capacity by appointing a Project Management Consultant (PMC) who would bring with them experts in the areas of Transport Planning, Procurement, Institutional development, Training and skill development, Social and Environmental safeguards etc and assist the PMU in all matters concerning project monitoring and management.

3.1.3. Project Consultants (PCs)

In addition to the PMC, the PMU would also procure the services of Project Consultants to assist them in the task of preparing and implementing the sub-components of component-1 which, as stated earlier, includes Institutional Strengthening, Individual Capacity Building and Preparation of Manuals and tool kits. The overall tasks to be undertaken by the three PCs have been summarized below:

Project Consultant for Sub-component 1 (PC1): Strengthening of IUT

PC1's task would be to strengthen the IUT by helping it to become a focal point in the country in respect of knowledge and information pertaining to sustainable urban transport. In the first six months, the Consultants would prepare a vision and business plan for IUT's sustained functioning. They will then implement the business plan over the next 16 months such that it would enable IUT to subsequently handle all the functions independently. This would include setting up of a Knowledge Management Centre, recruitment and training of competent manpower, initiation of research, consulting and training activities, information dissemination through workshops and seminars etc.

Major activities envisaged under this subcomponent are: hiring of PC; formulation of business plan, development of KMC; organising workshops and seminars; publications, recruitment and training of staff and enabling IUT to carry out research and consulting services. The proposed sequence of activities and time frames has been illustrated in Figure 3.2. The ToR of PC1 services spread over a 22 month period have been outlined in **Appendix 3-1**.

Project Consultant for Sub-component 2 (PC2): Training and Skill Development Programs

PC2's task would be to undertake training programmes for nearly 600 individuals engaged in urban transport all over the country. Their main tasks will include:

- Assessing training needs;
- Designing of training programs to cater to the training needs;
- Development of appropriate and effective modules/ training materials/tool kits in consultation with

experts at the IUT and MoUD;

- Training the trainers and providing them with high quality and effective support material to be able to provide high impact training to the trainees;
- Coordination with identified regional training centers;
- Organizing one round of training programs in each region to kick-start the continuous training programs;
- Evaluating the effectiveness of the training material and training providers through (a) 'Before and After' objective questionnaires and (b) End of the course evaluation of the training program.; and
- Suitably modify the training material, pedagogy, strategy, and approach of the training in light of the feedback received through first round of training, to accentuate the effectiveness of the subsequent programs organized by the IUT.

The duration of the PC is expected to be for a period of 20 months. The scope of work and terms of reference for PC2 has been outlined in **Appendix 3.2**.

Project Consultant for Sub-component 3A (PC3A): Needs Assessment of Manuals and Tool kits

PC3A's task would be to review the available sustainable urban transport manuals & toolkits and then to formulate the terms of references for preparation of these manuals and tool kits. The duration of this consultancy is expected to be 6 months. The scope of PC3 services has been outlined in **Appendix 3-3**.

Project Consultant for Sub-component 3B (PC3B): Preparation of Manuals and Tool kits

PC3B will be responsible for preparation and publication of all the manuals and then converting these into training material for subsequent use. The duration of PC3B will be for a period of 18 months. The scope of PC3B services has been outlined in **Appendix 3-4**.

Sub-components 4: Promotion, raising-awareness, and dissemination activities, to expand and enhance the impacts of the GEF-SUTP

The PMU will be the implementing agency for this sub-component and may hire the services of experts as and when required during its implementation. A work plan has been prepared which will be acted upon by the PMU with the help of PMC. The work plan requires that PMU shall take on a supportive and facilitative role towards nation-wide dissemination activities targeting public and private sector transport agencies and the general public as the end users of the promotion campaigning. The activities that are likely to take the program initiatives to the end users are listed in the **Table3.1**.

Table 3-1: Work Plan for Sub-Component 4

No	Method	IA	Purpose	Description	Timing
1	SUTP news letter	PMU	Awareness, Information	Use a newsletter to announce the project, give regular updates, and develop a profile. Use innovative techniques such as interviews with successful SUTP implementing agencies, some quotes from end users, or comments from an external evaluator.	Quarterly
2	SUTP website	PMU	For awareness, Information, Engagement and Promotion	Project website (giving project profile in e-portal developed through Knowledge Management Centre) is one of the most versatile dissemination tools. Explain the project and its components and their benefits. Information classification and regular updating should be done to attract interest of different audiences.	To Build (update with every significant or preferably quarterly)

No	Method	IA	Purpose	Description	Timing
3	Public Communication Activities	PMU	To create awareness	<p>Press Releases: Issue an announcement on the GEF funding implementation or an important achievement related to SUTP program as a supplemental addition of news papers.</p> <p>Flyers/ Brochures: hand outs can be given at conferences/meetings/seminars in various institutions/organisation. It can also be circulated electronically</p> <p>Poster demonstrations: at any transportation/ environment related conference/school shows</p> <p>Multimedia campaigns</p>	<p>Beginning and Ending of activity</p> <p>Twice during the project cycle for each city</p>
4.	Experience sharing Workshops	PMU	Replication of efforts and learning of lessons	Presentation during every Annual Conference on Urban Mobility in India of IUT	Annually

Sub-component 5: Technical assistance to cities to address emerging issues encountered during project implementation

The sub-component 5 has been proposed to be a "problem solving" component reserved for the nine SUTP cities. It would provide technical support to address particular problems which may be encountered by the cities during their implementation of the innovative demonstration projects.

The processes for accessing assistance by cities have been outlined in **Figure 3.2**. It will be implemented by the PMU with the help of the PMC. During the four year period of the GEF-SUTP the PMU will send a problem statement form (attached as part of **Appendix 3.5**) to the cities every year to identify their technical support needs based on the problems they have been confronted with during project Implementation. These forms sent by the cities will be studied by a panel of experts and 1-2 most striking topics from the problems will be identified. Then the PMU will prepare a RFP to invite universities/professors, consulting firms/consultants, professionals to submit proposals for the required technical assistance. The selected consultant will be expected to carry out studies and provide required technical support with the results being disseminated.

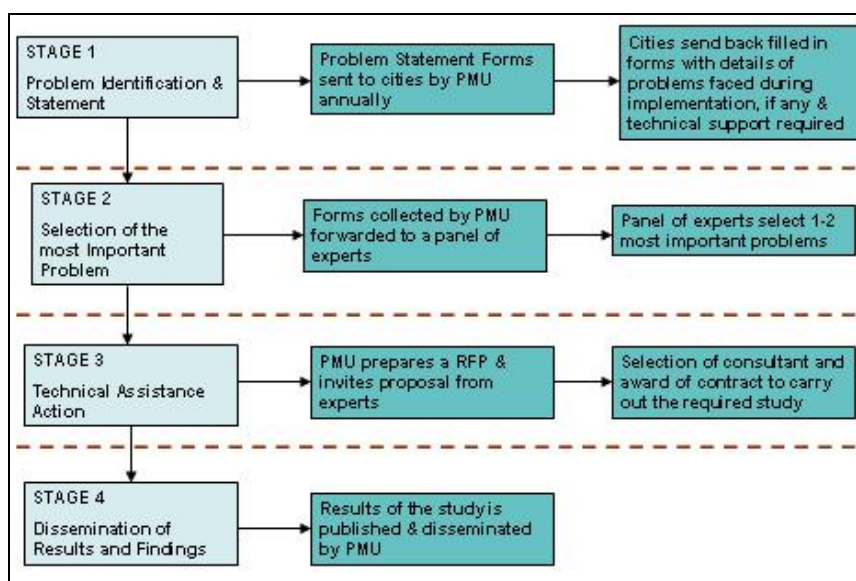


Figure 3-2: Process for Accessing Technical Assistance for Project Implementation

3.2 PROJECT IMPLEMENTATION PLAN

Based on the detailed scope of work under each sub-component an implementation plan has been prepared. The detailed implementation plan for sub-components 1, 2, 3, 4 and 5 is given in Figure 3.3.

PC No.	Activities	Months																								Year				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	3	4			
1	Strengthening of IUT (22 months)																													
	a Preparation of Business Plan for IUT																													
	b Development of Knowledge Management Centre																													
	c Publications																													
	d Recruitment of Staff																													
	e Training of Staff																													
	f Initiate Consulting and Research Activities																													
2	Training and Skill Development Programs (20months)																													
	a Preparation of Training Material																													
	b Training of Trainers																													
	c Enabling IUT Staff to handle the Training																													
	d Evaluation of Training																													
3A	Needs Assements for Manuals and Toolkits (6months)																													
	a Needs Assessment Manuals and Tool Kits																													
	b Draft ToRs fro preparation of Manuals and Toolkits																													
3B	Preparation of Manuals and Toolkits (18months)																													
	a Preparation of Manuals and Toolkits																													
	Activities to be Carried out by the PMU																													
1	Promotion, Raising Awareness and Dissemination Activities																													
	a SUTP Newsletter																													
	b Development and Updation of SUTP Website/webpage																													
	c Public Communication Activities																													
	d Experience Sharing Workshops																													
2	Capacity Development Assistance for Participation Cities																													

Figure 3-3: Implementation plan for sub-components of Component 1

3.3 PROJECT EXIT STRATEGY

The Component 1 will be implemented and managed by the PMU with the help of PCs and the PMC for the SUTP period of four years, after this the activities are expected to be carried out by the staff hired and trained for IUT during the project period.

A Business Plan is proposed to be prepared for IUT under sub-component 1. The document will propose the organizational set up for IUT and will give an estimate of the required human resources to undertake the tasks outlined. The proposed positions created will represent the permanent structure of IUT. The PC responsible for preparing the Business Plan will assist in

the appointment and training of these professionals to undertake the functioning of IUT after the SUTP project period.

Chapter 4. Costs and Sources of Funding

The estimated costs of implementation of component 1 and the funding sources have been discussed in the present chapter. The second section discusses the fund flow pattern for this component.

4.1 COSTS AND SOURCES OF FUNDING

The estimated cost of planning, organizing and implementing the activities and sub-tasks of Component 1 is equivalent to USD 15.2 million as shown in the **Table-4.1**. Funds for undertaking activities under the component 1 will be sourced from three agencies namely, GoI, GEF (UNDP) and GEF (World Bank). Sub-components 1& 2 will be jointly funded by the UNDP and GoI, sub-components 3 & 4 will be entirely funded by the UNDP and the sub-component 5 will be jointly funded by the World Bank and GoI.

Table 4-1: Costs and Sources of Funding for Component 1 *(in USD millions)*

No.	Sub-Component	GEF (UNDP)	GEF (WB)	GOI	Total
1	Strengthening of IUT	1.62	0	2.27	3.89
2	Training and Skill Development Programs	1.44	0	0.80	2.24
3	a) Needs Assessment of Manuals and Tool kits	0.25	0	0	0.25
	b) Preparation of Manuals and Tool kits	0.00	0	1.36	1.36
4	Promotion, raising-awareness, and dissemination activities	0.2	0	0	0.20
5	Technical assistance to cities to address emerging issues encountered during project implementation	0	6.4	0.7	7.1
6	Contingency	0.08	0	0.08	0.16
	Total	3.60	1.35	5.20	15.2

The sub-component wise cost break up has been given in **Table 4-2** and detailed costing has been given as part of **Appendix 4.1, 4.2 & 4.3**.

Table 4-2: Sub-component Costs and Sources of Funding *(in USD millions)*

Sub - Components	S. No	Description	Total Cost	GEF	GOI
Sub-Component 1	1	Project Preparatory Consultancy	1.31	0.00	1.31
	2	Knowledge Management Centre (KMC) (Indicative- the actual will be worked out by PC 1)	1.98	1.11	0.87
	3	Publications	0.25	0.21	0.03
	4	Research Activities	0.35	0.30	0.05
		TOTAL	3.89	1.62	2.27
Sub-Component 2	1	Project Preparatory Consultancy	1.37	0.61	0.76
	2	Training Expenses for year 3 and 4	0.60	0.60	0.00
		Training/ Workshops division at IUT	0.27	0.23	0.03
		TOTAL	2.24	1.44	0.80
Sub-Component 3A	1	Project Preparatory Consultancy	0.25	0.25	
		TOTAL	0.25	0.25	
Sub-Component 3B	1	Project Preparatory Consultancy	1.18		1.18
	2	Printing Cost of 1000 Manuals	0.19		0.19
		TOTAL	1.36		1.36

4.2 FUND FLOW

The **Figure 4.1** shows the fund flow mechanism to be followed for accessing funds from the various agencies.

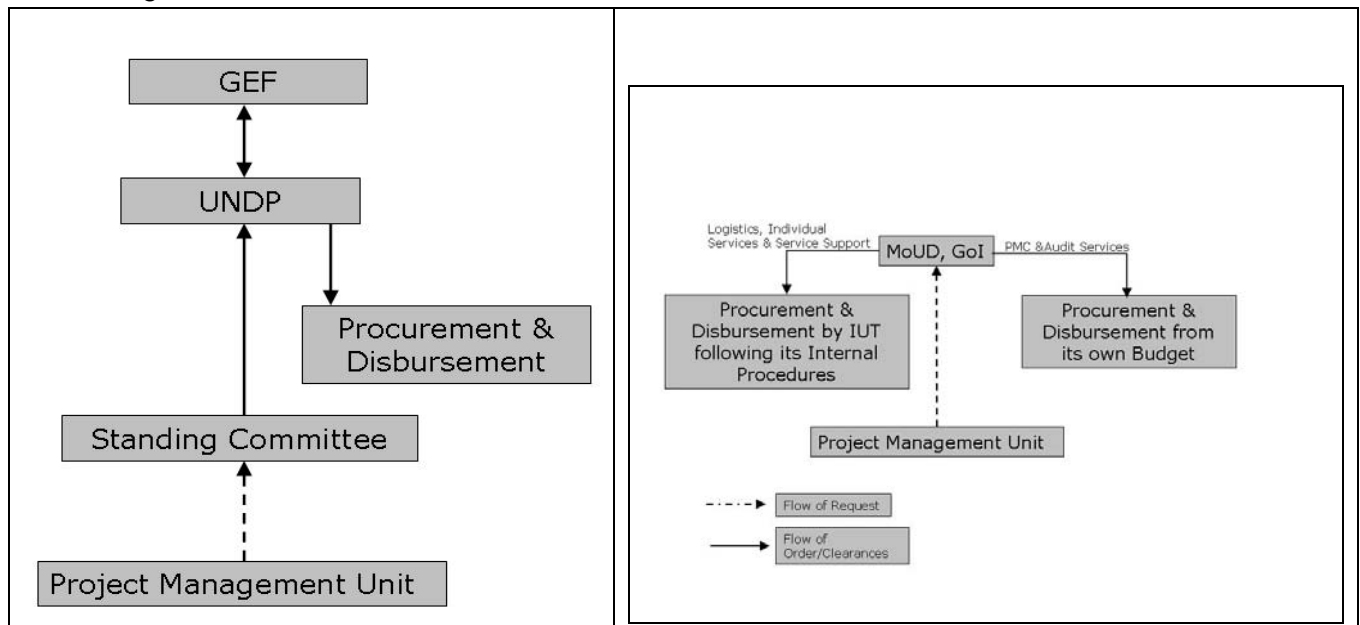


Figure 4-1a. GEF (UNDP) Funds

Figure 4-1b. GoI Funds

4.2.1. GoI Funds

As shown in Figure 4.1a, to access the GoI funds under this component the PMU will send a request to the MoUD. The MoUD will directly undertake procurement and disbursement for the PMC and Audit Services from its own allocated budget as per its own guidelines. The GOI will disburse funds to IUT for all other services and expenditures. These will be procured following the internal procedures of IUT

4.2.2. GEF – UNDP Funds

The GEF grant for sub-components 1 to 4 is to be sourced through UNDP. A Standing Committee under the chairmanship of the NPD has been set up for activities for which the UNDP is the funding agency. As shown in Figure 4.1b, The PMU will submit the request for funds to this committee. The committee will decide upon the request and after its approval the request will be forwarded to the UNDP. UNDP will then carry out the requested procurement and disbursement activities as per its prescribed guidelines and seek the funds directly from GEF.

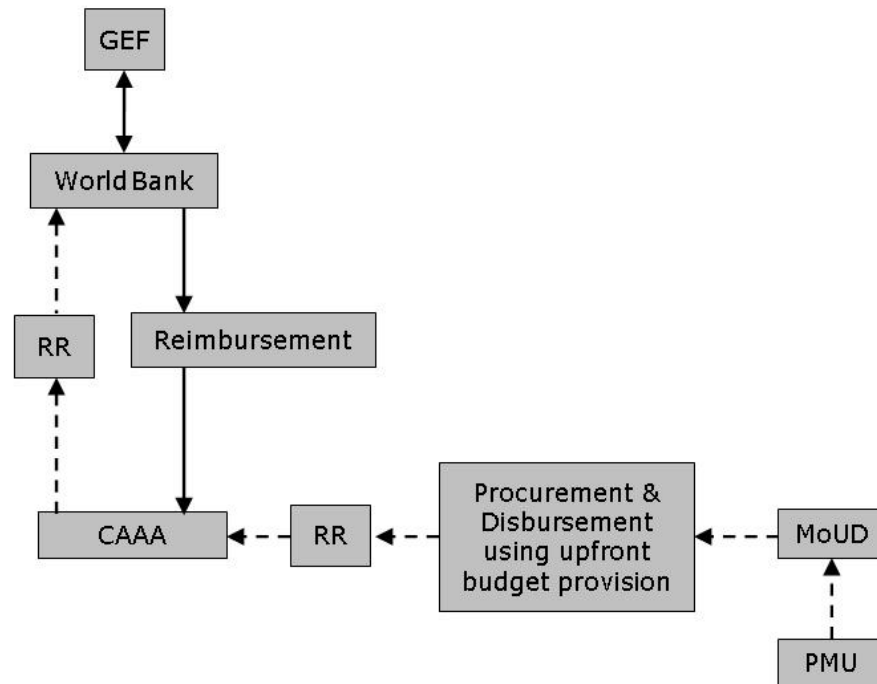


Figure 4-1c. GEF– World Bank Funds

4.2.3. GEF – World Bank Funds

The GEF grant for sub-component 5 is to be sourced through World Bank. As indicated in Figure 4.1c, the PMU will submit a request to the MoUD to undertake a specific activity under the sub-components. The MoUD will carry out the procurement and disbursements as per its prescribed guidelines using the upfront budget provision created for the project. It will then submit a request for reimbursement against the expenditure incurred to CAAA, which in turn will put it up to the World Bank. After review the Bank will reimburse the amount to CAAA, which in turn will reimburse it to MoUD. The World Bank will seek funds directly from GEF.

Chapter 5. Procurement Plan

5.1 INTRODUCTION

The procurement plan given in this chapter provides an indication of the various procurements required under this project component and suggests the procedure and schedule to be adopted. It is expected that this would help in preparing the appropriate bidding documents and initiate the procurement process.

The procurement guidelines for procurement of Works, Goods, Equipments and Services would be specific to the funding agency as mentioned below.

- i) Services/Goods to be procured using GEF (UNDP) funds will be done as per the guidelines of UNDP, for which recommendations of the Standing committee¹ shall be sent to UNDP for procurement and disbursement.
- ii) Large Consultant services to be funded by Government of India (GOI) will be procured by Ministry of Urban Development (MoUD) as per GOI guidelines, which have been elaborated in the General Financial Rules 2005 of the Ministry of Finance, GOI.
- iii) Procurement of Goods and Services of individuals for support to PMU using GOI funds shall be undertaken by IUT following its internal procedures.

5.2 PROCUREMENTS

Table 5.1 gives the expected list of goods and services which need to be procured for planning and implementing Component 1. As these procurements are to be funded by either the GOI or the UNDP or the World Bank, the respective procurement procedures are to be adopted.

Table 5-1 Procurement for Component 1

Procurements		Type of Procurement	Source of Funding	Procurement Procedure
Sub-component 1 : Strengthening of IUT				
1	Project Consultant 1	Services	GOI	GOI
2	KMC Staff	Services	UNDP	UNDP
3	KMC Equipments	Goods	UNDP	UNDP
4	KMC Establishment	Logistics	GOI	IUT
5	Publications Staff	Services	UNDP	UNDP
6	Publications Materials	Goods	UNDP	UNDP
7	Publication Establishment	Logistics	UNDP	UNDP
8	Research Staff	Services	UNDP	UNDP
9	Research Materials	Goods	UNDP	UNDP
10	Research Establishment	Logistics	UNDP	UNDP
Sub-component 2 : Training and Individual Capacity Building				
1	Project Consultant 2	Services	GOI	GOI

¹ Standing Committee consists of OSD, (MRTS) MoUD, MoEF, and UNDP
May 2009

Procurements		Type of Procurement	Source of Funding	Procurement Procedure
2	Training Programs	Services	UNDP	UNDP
3	Training / Workshop Division at IUT	Services	UNDP	UNDP
Sub-component 3 : Manuals and Toolkits				
1	Project Consultant 3A	Services	UNDP	UNDP
2	Project Consultant 3B	Services	GOI	GOI
3	Training Materials Printing Cost of 1000 Manuals	Goods	GOI	GOI
Subcomponent 4 : Publicity and Awareness Campaigns				
1	Appointment of Agencies	Services	UNDP	UNDP
TA's to resolve issues during Project Implementation				
1	Research and Report	Services	WB & GOI	WB & GOI

5.3 PROCUREMENT PROCEDURE FOR LARGE CONSULTANCY SERVICES FUNDED BY GOI

The GOI process to be followed for the selection of eligible PCs is detailed in **Table 5.2**. The necessity of short listing consultant through an Expression of Interest might vary depending upon the project cost, but in general it will remain as a standard procedure.

Table 5-2: Procurement Plan for Hiring of PCs

Step	Task	Description	Responsibility
1	Notification	Invitation for EOI to be published in leading national news paper or gazette or electronic portal. A period of 3 to 4 weeks would need to be given for the receipt of EOIs from date of notification. The EOI format outlined for the project has been given as part of Appendix 5.1 .	MoUD
2	Short list of Bidders	On the basis of responses received, consultants satisfying the eligibility criteria given in the EOI notification should be short listed for further consideration. The number of short listed consultants should not be less than three.	Evaluation Committee constituted by MoUD/ UNDP
3	Prepare Request For Proposal (RFP)	The RFP shall include, a Letter of Invitation (LoI), Information to Consultants, the TOR and proposed contract.	MoUD/UNDP
4	Issue of RFP	The RFP should be issued to the short-listed consultants to seek their technical and financial proposals. (Refer RFP given in Appendix of Volume 2 of the Project Information Document on National Capacity Development Initiatives). The RFP should contain, <ol style="list-style-type: none"> 1. A letter of Invitation 2. Information to Consultants regarding the procedure for submission of proposal 3. Terms of Reference (TOR) 4. Eligibility and pre-qualification criteria in case the same has not been ascertained through Enquiry for Expression of Interest 5. List of key position whose CV and experience would be evaluated 6. Bid evaluation criteria and selection procedure 7. Standard formats for technical and financial proposal 8. Proposed contract terms <p>Procedure proposed to be followed for midterm review of the progress of the work and review of the final draft report The RFP format outlined for the project has been given in Appendix 5.2.</p>	Evaluation Committee constituted by MoUD/ UNDP
5	Bid Evaluation	Evaluation will be based on one of the methods; such as, the Quality and Cost Based Selection (QCBS), Quality based selection (QBS), Least Cost Selection (LCS), Single source Selection (SSS),	MoUD/UNDP

Step	Task	Description	Responsibility
		Selection of Individual Consultant procedure, depending upon the type of consultancy required and availability of budget and as per the criteria specified in the RFP.	
6	Negotiations	The Bidder with highest combined marks for technical and financial bids shall be invited for negotiations.	MoUD/ UNDP
7	Award of Contract	Award of Contract should be authorized by the Competent Authority and is normally made by means of a letter accepting the tender of the winning Bidder. A contract award letter should refer to the documents, including contract negotiations if any, that make up the contract.	MoUD/ UNDP
8	Debriefing	All unsuccessful Bidders shall be debriefed immediately after the winning Bidder has been awarded the contract.	MoUD/ UNDP

5.4 PROCUREMENT SCHEDULE FOR LARGE CONSULTANCY SERVICES FUNDED BY GOI

The procurement schedule for the selection of PCs is outlined in **Table 5.3**. The process from the issue of EoI to award of contract has been envisaged to take a minimum of 24 weeks.

Table 5-3: Procurement Schedule of PC

Contract Number	Task	Action from	EOI (Weeks)	RFP (Weeks)		Award of Contract (Weeks)
			Invitation & Shortlist	Issue & Receipt	Bid Evaluation	
PC – 1	IUT Strengthening (Institutional Capacity Building)	PMU	0 + 7 =7	7 + 6 =13	13 + 4 =17	17 +7 =24
PC -2	Training & Skills Development Programs (Individual Capacity Building)	PMU	0 + 7 =7	7 + 6 =13	13 + 4 =17	17 +7 =24
PC -3A	Review and Preparation of Terms of References to Manuals and Toolkits	PMU	0 + 7 =7	7 + 6 =13	13 + 4 =17	17 +7 =24
PC -3B	Preparation of Manuals and Toolkits based on the Terms of References	PMU	0 + 7 =7	7 + 6 =13	13 + 4 =17	17 +7 =24

5.5 PROCUREMENT OF GOODS AND SERVICES FUNDED BY UNDP

Procurement of goods and services funded by UNDP shall be undertaken by UNDP on receipt of recommendations from the Standing Committee and required bid documents and RFP formats will be provided by UNDP.

5.6 PROCUREMENT OF GOODS AND INDIVIDUAL SERVICES FUNDED BY GOI

Procurement of Goods, office furnishings, equipments and individual services, required by IUT to provide logistic and other service support to PMU, shall be undertaken by Institute of Urban Transport (IUT) following its internal procedures, with funds to be provided by MoUD.

Chapter 6. Monitoring and Evaluation of Outcomes

The M&E of outcomes will identify problem areas at the national level, help to administer project processes, aid in project design and implementation, help make mid-course corrections, and enable the project to achieve its overall development objective. M&E is required for two purposes.

- M&E of project implementation
- M&E of project outcomes

In both cases, M&E will utilize a set of performance indicators. The primary responsibility for M&E and reporting will be with the PMU, led by the National Project Manager and assisted by the PMC.

6.1 PERFORMANCE INDICATORS

Performance indicators are measures of inputs, processes, outputs, outcomes, and impacts for projects and programs. When supported with sound data collection—perhaps involving formal surveys—analysis and reporting, indicators enable project managers to track progress, demonstrate results, and take corrective action to improve service delivery. Involvement of key stakeholders in defining indicators is important because they are then more likely to understand and use indicators for management decision-making.

6.2 M&E OF PROJECT IMPLEMENTATION

During implementation, PMU with the help of PMC shall monitor and evaluate progress and results against a work plan and results framework. The PMU team members should meet at least once every month to review the progress in implementing the detailed work plan developed at the commencement of the project/program. The specific aims of these meetings would be to monitor timelines and expenditures in the completion and delivery of scheduled activities and outputs respectively, and highlight exceptions. At these meetings Managers of ongoing contracts awarded to implement various components, should submit a report on:

- Proportion of scheduled activities that were commenced and completed on time.
- Proportion of scheduled expenditure incurred for the activities undertaken
- Details of activities that were started or finished late
- Problems that were experienced or are anticipated and proposed remedial actions
- Major activities planned for the next month.

Each PC shall send a monthly progress report to the PMU summarizing the above aspects.

6.3 M&E OF PROJECT OUTCOMES

The M&E framework should delineate outcome and output indicators for the Project Development Objective (PDO) and associated intermediate outcomes. PMC shall use the progress report of the PCs and the Project Information Document (PID) of this component to identify indicators to monitor and evaluate the project outcomes. To avoid collecting redundant, or an excessive volume of under-utilized data, indicators should:

- Correspond to the PDO/intermediate outcome/output
- Be credible

- Be derived from reliable data that is currently or can be easily collected
- Be straightforward.

Each indicator should have a baseline and target values. A baseline value represents the value of the indicator prior to implementation of a project/program. The PMC should establish the baseline values prior to project implementation. Target values as expected in the PID shall be the basis for monitoring, evaluating and reporting performance over time through the collection of time series data. The PMU should periodically review targets for reasonableness, and where necessary revise them.

Baseline and time series data can be collected through a variety of methods including mining existing data repositories, rapid appraisal methods, surveys, expert panels, key informant interviews, extraction from other data sources, ad hoc studies etc. Each method has its advantages and disadvantages with respect to data quality and collection cost. Formal data collection methods (e.g., large-scale random sample surveys) typically deliver excellent quality data, but, the cost of data collection is high. Informal methods (e.g. key informant interviews) typically produce low quality data but also cost much less.

6.4 DATA COLLECTION AND REPORTING

The PMC will assist the PMU to monitor and evaluate the outcomes of the project. **Table 6.1** below provides an indicative list of parameters for monitoring the outcomes of component 1 of SUTP, the data collection method and frequency of collection. The PMU would finally specify how, where and when baseline and time series data is to be collected, collated, analyzed and presented.

Table 6-1: Monitoring and Evaluation of Project Outcomes of Component 1

Component 1 : National Capacity Building and Institutional Strengthening		Project Development Objective	Project Outcome Indicator	Monitoring Parameter	Data Collection Method	Frequency	Responsibility	
Sub component 1	Strengthening IUT	Strengthen the national and local governments capacity in planning, implementing and managing climate friendly and sustainable urban transport interventions	Cities increasingly express their interest in planning and implementing projects in conformity with NUTP and few of these demonstrate progress in doing so, during the project period.	Functional CDP and CMP	Confirmation from cities/State Governments on the subject	Quarterly and Annually	PMU/IUT	
Sub component 2	Individual Professional Capacity Development							
Sub component 3A	Needs assessment for Manuals, Standards and Tool kits		Cities/State Governments express intention to adopt technical products issued by national government during the project period	Manuals, standards toolkits distributed following receipt of request	Count of number of cities/state governments expressing intention to adopt the material prepared	Quarterly and Annually	PMU/IUT	
Sub component 3B	Preparation of Manuals, Standards and Tool Kits							
Sub component 4	Promotion, raising awareness and dissemination activities							
Sub component 5	Capacity development assistance for Component 2							
Project Progress Evaluation						Mid-term and Terminal	UNDP and GEF	

APPENDICES

APPENDIX 2.1: ToR for Land-Use and Transport: Macro Planning

1. BACKGROUND

Mobility and transport needs are strongly affected by land-use planning and it reduces the amount of travel needed to access services, facilities, and social networks. In this context, land-use is much more than the location and density of residential development, together with the permitted mix of uses (residential, retail, services, employment, health, leisure, etc.). In current land-use planning practices especially for new developments, marketing concerns often outweigh considerations of sustainability and functionality for future generations. While compact communities with locally available facilities and services encourage Non Motorized Transport (NMT), this pattern is of general benefit to society and supports environmental sustainability policies. Land-use planning can lead to improved, cleaner and safer traffic management in and around residential and other developments, for example, by diverting high speed traffic to suitable roads and by minimizing the traffic in residential areas. Thus, integration of land-use and transportation should be an essential ingredient in any programs targeting clean and safe mobility.

There should be a national government policy to encourage the development of more sustainable communities. Policies must concentrate on locating development where it can be served by public transport and NMT, resulting previously developed land developing higher density residential areas, encouraging mixed use of developments, and discouraging developments that require automobile dependence. A well developed sustainable transport planning is achieved through these four steps; Integrating transportation and land-use planning, managing demand for road use through segregating NMT, and providing quality public transport choices.

For any land-use planning implementation, the following aspects should be considered.

- While land-use and transport planning are two different disciplines, they should be closely aligned and integrated. The planning process requires inputs from public and private planners, and equally importantly, from transport customers and the general public.
- Planning that does not consider the needs of the broader society is inadequate
- Research and development, appropriate legislation and regulation, suitable fiscal incentives, law enforcement and public participation and negotiation are all prerequisites that should be in place prior to the implementation of land-use policies
- The co-operation of planning authorities at the macro and micro levels is crucial to the success of land-use planning. The responsibilities, competencies, and tasks at each level need to be defined.
- Explicit competitive goals are required to ensure that desired results are attained
- The different working methods and cultures of various professional and others involved in the planning process must be recognized to ensure an integrated and widely accepted outcome.

2. SCOPE OF WORK

The scope of work for the preparation of manual would include the broad procedure for the integration of Land-Use and Transportation planning for both existing and new communities. These communities not necessarily be big size communities, but they could be small in size and assemblage of all these small communities would help us to achieve at macro level.

2.1 Fundamental Instruments:

- i) Consistency between land development, utilities and public facility plans with the transportation plan
- ii) Coordination with other localities' plans and regional and state strategic visions
- iii) Environmentally friendly plans, which
- Place development where transportation can reasonably be provided
- Place transportation facilities for minimal human and natural environment impacts
- Are consistent with environmental regulations and polices for water supply watersheds, wetlands, high hazard areas, steep slopes, critical habitats, protected farmlands, open space, etc.

2.2 Policy Instruments

The most important data and policy information to feed transportation planning would include, but not limited to,

- Policies pertaining to legal issues:
 - Inventory and assessment of local, state, and central policies, ordinances, and programs that affect development and redevelopment
 - The legality of any local planning activities
- Policies pertaining to land parcels:
 - Vacant and developable areas
- Infrastructure policies:
 - Plans to extend water and sewer facilities, as well as other public infrastructure
 - Long term growth in areas that use septic systems – need to keep them very low density if not going to extend water and sewer. Would extension promote more growth?
- Timing policies:
 - Phasing and timing of growth
 - Priority areas for development – to help schedule priority areas for transportation improvements
- Transportation Connection policies:
 - Desired roadway projects
 - Areas that can support public transit or pedestrian and bicycle travel
 - Development along the new or improved roadways
 - Access management strategies along national highways
 - Particular areas of concern that need to be served such as heritage areas, slum areas, etc
- Environmental policies:
 - Policies for hazard mitigation, as applicable to the area – hurricane, flood, landslides, drought, ice storms. These hazards affect the transportation system, both in terms of flooding across roads, etc, or roads and evacuation plans.
 - Environmental suitability of areas for development or transportation projects
 - Broad classification of use (industrial, commercial, residential), including holding capacity
 - Priority land use outcomes and alternative outcomes if transportation plans cannot adapt to the land use. This can be used to model scenarios
 - Description of employment or the types of retail development that is allowed in certain areas, with some estimate of numbers of employees

2.3 Implementation Instruments

2.3.1 Linking Planning and Operations

An effective transportation system requires not only the provision of roads and transit infrastructure, but also the efficient and coordinated operation of the transportation network at macro as well as micro level planning in order to balance the overall planning. The connections between transport operators and transport planners would be achieved through linking their operational planning. This in turn, would help ensure that regional transportation investment decisions reflect full consideration of all available strategies and approaches to meet regional goals and objectives.

2.3.2 Applying Street Design Classification to Land-Use Plans

Road patterns should be designed in such a way that they support the specific needs of land-use components, such as town centres, neighbourhoods and main streets. The three broad classifications of roads should be implemented while integrating land-use and transport planning are,

- Functional Road Use: This prevents the unnecessary use of private vehicles
- Mixed Road Use: Irrespective of the mass, speed, and direction
- Predictable Road Use: Prevents the uncertain behavior

2.3.3 Street Connectivity Approaches

Though the design of local street systems is generally beyond the scope of a macro level plan, the aggregate effect of Local Street design impacts the effectiveness of the regional system when local travel is restricted by a lack of connecting routes, and local trips are forced onto regional facilities. The connectivity principles should *inter alia*:

- Anticipate opportunities to incrementally extend and connect local streets over time in primarily developed areas.
- Allow local street systems to serve a mix of development types within a continuous street pattern.
- Encourage pedestrian travel by ensuring that the shortest, most direct routes are provided to nearby existing or planned commercial services, schools, parks and other neighborhood destinations.
- Ensure that local residents have access to existing or planned commercial services that provide for daily or weekly needs without using regional facilities.
- Allow narrow street designs to conserve land, calm traffic or promote connectivity.
- Limit closed street systems and cul-de-sac designs to situations where topography, environmental impacts or existing development patterns prevent full street connections.

2.3.4 Access Management

Some of the regulatory techniques that can be included as part of access management are,

- Driveway spacing and operating characteristics
- Minimizing commercial strip development
- Promoting mixed-use zoning

APPENDIX 2.2: ToR for Environmental Considerations in Urban Transport Planning

1. BACKGROUND

As one of the objectives of SUTP is to adopt energy efficient modes of transport in the present urban scenario, various alternatives are to be explored and proposed as part of the SUTP. Integration of environmental concerns in the project conceptualization stage would eliminate any major environmental effects that may arise later during the course of implementation of proposals. Policy level decisions that may be necessary at this stage may as well be considered towards enabling energy efficient modes of transport being brought to the mainstream of implementation.

As the SUTP is administered by the Government of India through the Ministry of Urban Development (MoUD) and concerned state governments, the sub-projects prepared would take into account the environmental policies and regulations of both the central and state governments and the multilateral funding agencies that have agreed to provide funding for the project.

2. SCOPE OF WORK

The scope of work will be to prepare a manual to guide transport professionals towards incorporation of environmental concerns while planning a sustainable urban transport system. These concerns should be incorporated in various stages of project conceptualization and planning. This would in effect contribute to address related aspects of sustainable transport policy and planning options to render transport sector environmentally safe in specific context to Indian conditions. It should include appropriate information for decision-making to contribute to establish an environmentally friendly and sustainable integrated context for the development of policies and plans.

This manual on incorporation of environmental considerations in urban transport planning should contain an illustration of mechanisms that are required for incorporation of environmental and social considerations in the preparation of Comprehensive Mobility Planning. The following aspects should be adhered to while preparing the manual but need not be limited to:

- Provide guidelines for assessment of viable project alternatives with baseline environmental conditions derived from the likely environmental, social, cultural resources (the Valued Environmental Components - VEC) that would be possible for existence in the project areas. The manual should provide quantification tools that could be utilized effectively at each stage of alternative analysis and with least amount of time and resources. The level of analysis needed is through which it could be determined with reasonable confidence on the occurrence of a particular impact with the implementation of the identified sub-project.
- Any additional surveys / tasks for collection of primary / secondary data towards establishing a preliminary baseline environment and socio-economic situation of the project that would aid decision making in prioritization, screening and finalization of alternatives from environment, social and / or cultural aspects point of view should be provided in the manual. Guidance should be provided in the manual for spatially representing this information for a comprehensive understanding of the environmental, social and cultural linkages in the project area.
- The manual should provide guidance to clearly identify feasible policy and planning options and compare them in an assessment context. The extent of analysis for the alternatives should be at a

macro level in the planning stage while at the same time provide guidance for recommending project level alternatives at the sub-project levels.

- The manual should provide guidance in utilizing established tools and techniques for incorporation of identified environmental, social and/or cultural concerns into project planning.
- Removal of structures whether titleholders or encroachers / squatters, is one of the key aspects in designing any transport network in the urban areas. This necessitates incorporation of guidelines for determining the extent of acquisition and resettlement that is appropriate while planning a sustainable urban transport network. It should also provide an illustration of the block estimates of likely costs for relocation and rehabilitation of the affected persons so as to make an informed decision on the transport network alternatives.
- It is also important for the manual to provide guidance on the consultations that need to be carried out for inclusion of various stakeholders in the decision making process and ensure the project being planned is socially acceptable.
- Guidance on incorporation of environmental gains (such as improvement in air quality, reduction in greenhouse gas emissions etc) and losses (such as worsening environmental quality and traffic safety) should be provided in the manual. Where applicable, provide guidance in adopting practical methods to quantify the benefits and losses.
- The manual should provide adequate guidance on incorporation of safety issues for both pedestrians and road users while planning the interventions.
- Necessary guidelines towards selection of appropriate mode of transport with environmental considerations have to be incorporated in the manual in case of change of fleet situations. This may include specific emission standards that the fleet need to follow given the existing situation of pollution in the urban area. This may even include recommending low emission vehicles / electric motor driven or automobiles on hybrid technologies of gas and electricity / fuel cells and combinations thereof.
- Presence of environmentally sensitive areas, if any in an urban area receives utmost prominence in the environment context. The manual should provide necessary guidance in addressing the environmental issues that may arise out of such situations and integrate them with the overall planning process. The manual should provide a wide range of choice of addressal including realignment of transport network from sensitive areas and even choice of mode of transport.
- Necessary guidance on the review of the need for measures to ameliorate adverse environmental impacts, either existing or resulting from proposed projects or increased development should be provided.
- There should be recommendations on the team composition for examining the environmental and social components so as to identify the environmental and social issues in the planning stage of the study

APPENDIX 2.3: ToR for Strategic Environmental Assessment

1 BACKGROUND

The Sustainable Urban Transport Project, (SUTP) in India is administered by the Government of India through the Ministry of Urban Development (MoUD) and implemented by the various State Governments. Towards achieving the environmental objectives laid down in the SUTP, integration of environmental concerns in the project conceptualization stage would eliminate any major environmental impacts that may arise due to implementation of proposals down the project cycle. Strategic Environmental Assessment (SEA) is a tool for including environmental considerations into policies, plans, and programs at the earliest stages of decision making. SEA extends the application of environmental assessments (EAs) from projects to policies, programs, and plans. The SEA envisages a participatory approach for up streaming environmental and social issues to influence development planning, decision making and implementation process at the strategic level and can assist managers and leaders in policy & planning take decisions. SEA in this context is seen as an impact assessment tool as the range of concerns to be addressed in SEA would go far beyond environmental issues. This SEA would incorporate decision-making tools from policy to programming to plan preparation levels and interfaces the scope of application of project EIAs for identified sub-projects in the SUTP. The SEA so prepared would take into account the environmental policy implications of the central and state governments apart from the environmental policies and regulations of multilateral funding agencies agreed to fund for the project. The SEA would thus serve as a guidance manual for addressing environmental concerns at various levels of project conceptualization, planning and project preparation.

2 SCOPE OF WORK

The scope of work is to prepare a manual on Strategic Environmental Assessment that would address related aspects of sustainable transport policy and planning options to render urban transport sector environmentally safe in specific context to Indian conditions. It should include appropriate tools for decision-making to contribute to establish an environment friendly and sustainable integrated context for the development of policies and plans.

Environmental impacts at SEA stage would mostly be generic and would involve identification of generic impacts as well as generation of block mitigation measures. SEA is the most appropriate document and also most appropriate project stage to assess cumulative effects of project proposals in SUTP over a limited region like an urban agglomeration and also provide necessary screening context to lower levels EA, particularly project EIA. The following aspects should be adhered to while preparing the manual but need not be limited to:

1. Provide guidelines for SEA to observe the baseline environmental conditions and likely environmental, social, cultural resources that would be possible for existence in the project areas. The guidelines should concentrate more towards determining the extent of probability of occurrence of the resource and its type rather than on the quantum of the resource available. To the extent feasible suggest procedure & methods for spatial representation of the identified baseline conditions.

2. The consultants shall determine appropriate macro and regional environmental issues in the project on the Valued Environmental Components identified in the project areas.
3. SEA should include application of appropriate impact analysis tools to for utilizing towards impact analysis and quantification of impacts that can occur at project level, improving and strengthening project EIA. Appropriate level of analysis at the SEA should be utilized to determine with reasonable confidence on the occurrence of a particular impact with the implementation of the identified sub-project. SEA manual should provide guidance in undertaking these aspects.
4. The SEA manual should suggest appropriate tools and methodology for assessment of credible emission reductions due to implementation of the project. The estimation of leakages in the methods suggested should be appropriate for application in Indian conditions and should be replicable for usage in all GEF projects.
5. The manual should provide guidance to clearly identify feasible policy and planning options (alternatives) and compare them in an assessment context. The alternatives at SEA stage should be macro alternatives while recommending project level alternatives to be carried out at the sub-project levels and guidelines are to be provided towards this end.
6. Suggest tools that could enable the SEA utilize them towards anticipation and quantification of impacts that can occur at project level, improving and strengthening project' EIA.
7. Enable the SEA manual provide guidance to clearly identify feasible policy and planning options (alternatives) and compare them in an assessment context.
8. The manual should recommend use of simple methods of assessment suitable for utilization by city planners who may not be explicitly qualified for carrying out environmental assessments as a routine.
9. The manual should involve the public and reflect the view of all actors and recommend use of good communication means for conduct of SEA.
10. The manual should draw upon guidelines for preparation of a well-structured environmental reporting process and planning process with assignment of responsibilities for compliance.
11. Enable SEA incorporate Proponent commitment and accountability especially where multiple organizations work together
12. The manual should incorporate guidelines for good practice and indicate resources available. A Terms of Reference based on the likely impacts that would be generated with the implementation of the sub-projects assessed through the SEA and would need to be addressed in the detailed EA stage of the project should be included in the manual.

APPENDIX 2.4: ToR for Sustainable Urban Transport Database Management

1. INTRODUCTION

Exhaustive and accurate Data Collection related to sustainable urban transport is required for planning operations and implementation of effective systems in Indian cities. Adhering to the fundamental design attributes will standardize the urban transport network and result in an enhanced urban transport provision. The state-of-the-art standards make urban transport more attractive by increasing passenger comfort, convenience and accessibility, and feelings of security.

The database would include all modes of transportation utilized on urban routes, including private and public vehicles, heavy and light rail, ferryboats and carpool service, as well as services for senior citizens and persons with disabilities, and taxi services operated under contract to a public transportation agency. This manual would come into use as the central resource which informs and influences transport infrastructure planning decisions at urban and regional levels of state government agencies, local governments and the private sector. It is envisaged the manual will aid more to,

- Transport planners and civil engineers
- Urban and regional planners and urban designers
- Landscape architects and architects
- Governments

There is thus a felt need for preparation of manual on sustainable urban transport data collection and operations planning. This manual would help in the compilation of detailed demographic, operational and construction data regarding public transportation.

2. SCOPE OF WORK

2.1 OPERATION OF NETWORKS

With regard to operation and maintenance of networks it is required to present a clear and detailed view of the state of transit. To this end a great deal of information must be collected. This is the job of the transit reporters, who usually fall into one of three groups: (1) Transit agencies (2) Providers of purchased transportation services (3) Voluntary reporters. Whoever might be the data reporter, the types of data to report should include:

A. *Operational Characteristics*

Transportation system operational characteristics are influenced by number of different factors, which should be reviewed regularly to determine whether changes in project lists, prioritization or general plan policies are warranted. Characteristics that warrant monitoring will include, but are not limited to,

- Population and Employment growth
- Development activity
- Vehicle & Passenger Miles
- Traffic volumes and accident analyses
- Transportation facility construction and condition
- Plan amendments that occur over time

B) Service Characteristics

There is a need to determine the types of flexible services that are most appropriate for various population densities, markets, and circumstances, and to identify the situations in which flexible services may be more appropriate than conventional fixed route and para-transit services. These identifications should take into account the differences between implementing new services and replacing existing services, which is otherwise the determination of the service reliability and safety.

C) Capital Revenues and Assets

This would suggest a systematic process of maintaining, upgrading, and operating physical assets, such as transport fleet, roadways and bridges, in a cost-effective way. It might require latest computer aided technology along with engineering principles, business management, and economics to manage the sources of capital revenues and assets. Further, in this process,

- It provides tools for decision-making and creates a framework for short- and long-term planning
- Projects the conditions of transportation system based on different spending scenarios
- Takes professional recommendations and ideas in protecting transport assets

D) Financial Operating Statistics

Implementation of transportation plan is almost entirely dependent upon the availability of funds. A periodic review of funding should include items such as,

- An inventory of capital and maintenance expenditures
- Updates of planning level project costs
- Estimates of anticipated revenues
- An update of the long-term revenue forecast.
- Central, State, Local funding
- Costs

2.2 DATA MAINTENANCE

The collected data would then be disseminated in the form of,

A) Transit Profiles

This would give a quick glance of a transit agency's data for a given report year, including financial, operational and modal data with graphs to show relational data and performance trends from prior years' data. A profile shall be produced for each transit agency, as well as an urban summary profile.

B Data Tables

The purpose of the data tables is to present data across all transit agencies. Its functions range from Operators' Wages to Energy Consumption to Age Distribution of Active Revenue Vehicle Inventory.

C) Urban Transit Summaries and Trends

This publication is similar to the data tables, in that it presents types of data, but instead of presenting individual agencies' data for the year; it looks at the urban summary data, across prior

years, to present trends over the past decade. The trends and summaries would include, but not limited to:

- Operating Costs and Performance Measures
- Quality of Transit Service
- Reliability
- Funding Transit Operations
- Capital Investment in Transit
- Bus Fleet
- Fixed Guide way Mileage
- Alternative Fuel Usage

The collected data will be used in the formulation of national policy, central, state and regional planning & investment, transport data book, special analyses such as HOT lanes, fleet age, etc., research, and on private sector side (vehicle manufacturers and OEMs).

Some other important data to be included in the manual would cover the following aspects,

- *Propensity for using public transit*: For a sub-population, its level of transit usage, taking into account the number of persons from this population group who perceive public transit to be available.
- *Availability & Proximity to public transit*: Proportion of people who perceive public transit to be available in the city
- *Transferring*: Distribution of linked trips with respect to the number of transfers involved and percent of unlinked trips that are transfer trips.
- *Trip characteristics* of public transit trips including trip distance, travel time (excluding waiting time), waiting time, travel speed (excluding waiting time), and overall speed (including waiting time)
- *Market shares*: For a given sub-population, the proportion of linked person trips by this population group made on public transit relative to all other modes of passenger transportation

This will act as a key source of information to analyze and improve the conditions of public transit services.

2.3 DECISION SUPPORT SYSTEM (DSS) INTEGRATED IN A GEOGRAPHICAL INFORMATION SYSTEM (GIS)

A decision support system (DSS) integrated in a geographical information system (GIS) for the analysis and evaluation of different transport policies would be covered. The objective of the manual would be to assist transport administrators enhance the efficiency of the transportation supply while improving environmental and energy indicators. The DSS would work on three levels. The first performs the transport network analysis, the second assesses the energy consumption and pollutant emissions and the third evaluates the several policies selected.

The guidelines would allow the estimation of traffic flow patterns within each link of the road network starting from the knowledge of the network characteristics and traffic demand. Energy consumption and pollutant emission calculations would be worked out. The evaluation of each policy scenario would be based on a number of traffic, environmental and energy indicators. A multi-criteria analysis, where decision would be based upon judging over appropriate weighted criteria, can be adopted. The policy measures, might include one concerning the extension of the region where part of the private cars are prohibited from entering the identified road network and the other the reduction of parking places in the same region by a percentage. The manual may provide guidelines to evaluate the alternatives.

APPENDIX 2.5: ToR for Environmental Impact Assessment

1. BACKGROUND

The Sustainable Urban Transport Project, (SUTP) in India is administered by the Government of India through the Ministry of Urban Development (MoUD) and implemented by the various State Governments. Towards achieving the environmental objectives laid down in the SUTP, integration of environmental concerns in the project conceptualization stage through a Strategic Environmental Assessment (SEA) to eliminate any major environmental impacts that may arise due to implementation of proposals down the project cycle.

Environmental Impact Assessment (EIA) assists project managers and leaders in policy & planning undertake decisions on implementation of a particular sub-project or take corrective actions towards control / mitigation of impacts. The EIA manual would incorporate decision making tools at plan preparation level and interfaces the scope of application for Project EIAs and for identified sub-projects in the SUTP. The EIA manual so prepared would take into account the environmental policy implications of the central and state governments apart from the environmental policies and regulations of multilateral funding agencies agreed to fund for the project. The document would thus serve as a guidance manual for addressing environmental concerns at various levels of project planning and implementation.

The EIA manual shall be a toolkit that shall guide the cities to integrate environmental concerns in project planning, design and implementation. The approaches towards environmental assessment for urban transport projects, study methods, standards, apart from an implementation handbook for EIA/EMP shall be part of the EIA manual.

2. SCOPE OF WORK

The scope of work is to prepare a manual for Environmental Assessment that would address related aspects of sustainable transport policy and planning options to render transport sector environmentally safe in specific context to Indian conditions. It should include appropriate tools for decision-making to contribute to establish an environment friendly and sustainable integrated context for the development of policies and plans.

Environmental Assessment is to be conducted prior to finalization of the respective sub-project proposals and initiation of detailed design. This assessment needs to be conducted at project preparation stage as the pre-feasibility and feasibility stages. The manual for environmental assessment should contain an illustration of the techniques that could be adopted for short listing of alternatives in the SUTP. Cumulative effects of implementation of various potential alternatives is to be assessed and the combination of feasible sub-project alternatives that least impact the environment are to be identified thus taking into account the cumulative effects of project proposals in SUTP. The following aspects should be adhered to while preparing the manual but need not be limited to:

- Provide guidelines to compile the baseline environmental conditions and likely environmental, social, cultural resources that would be possible for existence in the project areas.
- The consultants preparing the manual shall determine appropriate macro and regional environmental issues in the project on the Valued Environmental Components identified in the project areas
- The EIA manual should specify application of appropriate impact analysis tools for impact analysis and quantification of impacts that can occur at project level, improving and strengthening project EIA.

- The EIA manual should recommend use of appropriate GIS tools for analysis and interpretation of environmental aspects for consideration in project EIA.
- Appropriate level of analysis at the EIA should be conducted to determine with reasonable confidence, the occurrence of a particular impact with the implementation of the identified sub-project
- The manual should provide guidance to clearly identify feasible alternatives and compare them in an assessment context. The analysis of alternatives at EIA stage should culminate into recommending project level alternatives to be carried out and guidelines are to be provided towards this end
- Suggest tools that could enable the EIA utilize them towards anticipation and quantification of impacts that can occur at project level, improving and strengthening project EIA
- The EIA manual should illustrate application of the tools and methodology suggested in SEA Manual for assessment of credible emission reductions due to implementation of the project.
- The manual should recommend use of simple yet comprehensive methods of assessment suitable for carrying out environmental assessments as a routine
- The manual should involve the public and reflect the view of all actors and recommend use of good communication means for conduct of EIA
- The manual should draw upon guidelines for preparation of a well-structured environmental reporting process and planning process with assignment of responsibilities for compliance.
- Enable EIA incorporate Proponent commitment and accountability especially where multiple organizations work together
- The manual should incorporate guidelines for good practice while implementing projects towards safeguarding environment and indicate resources available in the project
- A Terms of Reference based on the likely impacts that would be generated with the implementation of the sub-projects and would need to be addressed in the detailed EIA stage of the project should be included in the manual.
- The manual shall identify environmental clauses for inclusion in the contract document
- The manual shall include checklists for various types of projects, at different stages of project cycle, so as to enable mainstreaming of environmental considerations in project planning, design and implementation.

APPENDIX 2.6: ToR for Pedestrian and Public Transport Friendly Site Planning

1. BACKGROUND

A regional transportation and land use policy should reflect in planning and investment principles. The relevant policy principles should be in such a way that link transportation and land use and to plan and build a well connected public transport. The manual thrust is that good site and community design can help realize a region's goals and that public transportation actions will play a critical role. The regional transport organizations are to be established for community and transportation linkage planning programs to provide funding to sound land use planning. A supportive land use would promote energy conservation, and improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns. By making use of site planning, the density of development can be controlled so that demand for transport is limited to the capacity of the public transport system.

2. SCOPE OF WORK

The scope of work would be to develop a manual covering related aspects of site planning that incorporates public transport easily. The site plan comprising all the land use issues along with public transport considerations shall include the following aspects:

2.1 LAND USE PLAN

Site planning with land use implications in India generally has proved to be ineffective, however and its implementation is beset by many serious difficulties. These include inefficient enforcement, wide disregard for regulations, and public opposition. This is mainly because of the many complex problems involved with land use planning and difficulties of adapting regulations to rapidly changing circumstances.

The following town planning approaches with step-by-step guidance are highly necessary in this regard.

- Enhance and develop activity centers and town centers that create more business to public transport.
- Encourage a greater mix and intensity of land uses
- Support urban revitalization and redevelopment of existing commercial/residential areas

2.2 TRANSIT DESIGN

The transit design would be to enhance and develop transit corridors and transit supportive built environments. Hence, it is required to identify the main traffic corridors and estimate the range of future demand. After forecasts of demand, estimates of costs of each option shall be obtained. Other factors to be considered in evaluating options are,

- a. The flexibility, the ease or difficulty of integrating them into city's existing transport system
- b. Degree to which they will disrupt city's activities
- c. Environmental impacts during and after implementation
- d. The costs of operation and maintenance.

Once certain options have been identified as appropriate, detailed feasibility studies can be undertaken. Economic analysis and financial planning to determine whether the new system is within the city's financial means will be of particular importance. In addition, the most suitable institutional arrangements should be identified for efficient implementation, operation, and maintenance of the system.

2.3 DRIVEWAY DESIGN

This improves street connectivity and reduces driveway conflicts. Congestion created by strips of roadside commercial land uses is one of the most objectionable impacts of development. Businesses naturally locate on the most accessible land, but the many driveways they require, and the congested intersections they create, impede travel to all locations. Road users, landowners, and businesses then suffer from reduced accessibility. Hence, access management is crucial at this point to consolidate driveways, provides better vehicle and pedestrian circulation, and otherwise reduces the impact of roadside land use on the efficiency of the road system.

In order to develop an effective access plan a good relationship among road agencies, local government, and property owners is very much essential. A coordinated planning involving transportation agencies is required for better results. Often, road and transit agencies are not informed of land-development plans until late in the process, although sometimes transportation agencies are the first to see land use proposals because of access needs. A commitment to reciprocal early notification and on-going coordination will make for better land use and transportation decisions.

2.4 ALTERNATIVE MEASURES

Urban areas will need to restrain the use of motor vehicles as part of an overall plan to encourage public transport conditions. Given the wide range of measures from, Road pricing and area licensing to staggered working hours and user taxes. The other innovative approaches would include,

- Rationalization of the use of urban transport facilities, particularly road space
- Provision of better access through cost effective improvements and extension of road networks

APPENDIX 2.7: ToR for Urban Street Design for Public and Non-Motorized Transport

1. BACKGROUND

There are many factors that make urban streets different from rural highways such as increased numbers of pedestrians, bicycles, business and residential driveways. Transit, drainage and intersections may also have unique design criteria when they are part of an urban street system. Traffic flow conditions, peak and off-peak speeds and volume variations are also significant and can affect street design. The manual should include schematic drawings and graphics and pictures to illustrate various urban street design practices.

The Manual on Urban Street Design would be intended to create "complete" streets, streets that provide capacity and mobility for motorists, while also being safer and more comfortable for pedestrians, cyclists, and neighbourhood residents.

The proposed Manual need to address a variety of design issues including sight distance assumptions, determination of the functional intersection area, and length of left-turn and right-turn bays. Corner clearance, minimum centerline radii, the rationale for the cross-section of arterials, collectors, and local residential streets and the effectiveness of intersection and median changes to a major urban arterial will also need to be covered.

The Urban Street Design Manual would be intended to ensure that the best aspects of a city's public transportation as well as non-motorized transport network are re-created as the City and its street network continue to evolve. This would mean that the various street design elements must be applied in the right mixes and in the right places. The process for planning and designing streets must also be sensitive to both the land use context and to the needs of the various users of a street.

2. SCOPE OF WORK

The manual should cater to the expectations of different categories of travellers from different locations in a street And should describe methods for applying the guidelines contained in the manual so that any tradeoffs are evaluated fairly for all stakeholders.

As a first step towards designing streets that provide viable transportation options is to understand that different users of the street will likely have different expectations of what makes a "good" street. A street design solution that works well for a motorist, for example, may or may not work well for a pedestrian or a bicyclist.

This is one reason Indian cities need to be more concerned about providing "complete streets." Further, even if every "ideal" design element for all of the travellers on a street were provided, then the resulting street might not satisfy the expectations of the people who live or work along it. These different stakeholders and their expectations for a street can complicate the design process, which is one reason the manual on street design should not treat it as a relatively straightforward task, with a pre-set menu of auto oriented cross-sections for streets with pre-defined functional classifications. That approach may not work in many cities, for a variety of reasons. One reason is that right-of-way becomes constrained as cities develop, and "standard" cross-sections are less likely to fit within the available right-of-way, particularly for retrofit projects. Another reason is that there is increasing concern about providing facilities that can be

used by people other than motorists. In these cases, designing the street has to be treated more as an analytic process - one that considers the various user perspectives and the surrounding land use context, in addition to the street function.

The guidelines in the manual should be intended to ensure a process that clearly, consistently, and comprehensively considers the needs of bus operators, pedestrians, and bicyclists and other Non Motorized Vehicles (NMVs) when planning and designing streets.

All streets would need to be evaluated in terms of how they affect many different groups, including:

- Motorists
- Pedestrians (including transit riders)
- Bus operators
- Bicyclists
- People living, working, or otherwise using the adjacent land uses

Each of these groups has expectations about how a given street should function and, therefore, how it should be designed. Various street users' perspectives and how they might be addressed in the design process.

2.1 STREET DESIGNS TO CATER TO NEED OF PUBLIC TRANSPORT DRIVERS

When a **Public Transport Driver** expresses a concern or makes a request related to streets, it often stems from congestion or safety concerns.

Public Transport Drivers might expect streets to be:

- Widened and signalized intersections
- Timed to enhance their own travel times, for example, the reduction in number of stop-controlled intersections so that they can maintain free flow.

To meet **Public Transport Drivers'** expectations for safe and efficient travel, perfect conditions over the street network would include:

- minimal travel delays
- minimal conflicts (affecting both delay and safety)
- consistently designed facilities

For the most part, though, urban streets may not be able to provide this combination of conditions except perhaps on freeways or other access-controlled roadways. Even then, travel delay and potential for conflicts with other vehicles will vary by time of day. Furthermore, consistent design is not only difficult to provide on urban streets, but probably not even desirable for other reasons (it is at odds with the concept of context-sensitive design).

Although providing all of the favourable conditions for **Public Transport Drivers'** described above is difficult, there are ways to achieve some of the **Public Transport Drivers'** preferences, either through construction or operational changes. These approaches may include but not limited to:

- Adding through or turn lanes to increase capacity, which can help reduce delay, at least temporarily
- Making operational changes, such as providing more green signal time to the street with the higher

traffic volumes, which can reduce the wait time at signalized

- Intersections for those **Public Transport Drivers** on the higher volume street while increasing the wait time for motorists entering from the lower volume side street
- Constructing grade-separated intersections and roundabouts, rather than signal or stop controlled intersections, which can also limit delay and increase capacity
- Using bus pullouts to separate stopping transit vehicles from the travel lane and, therefore, to help reduce delay

Public Transport Drivers not only want to travel quickly, but they also want to arrive safely. A variety of design features have been used elsewhere to enhance drivers' safety which may include:

- wide travel lanes are generally considered more forgiving to the **Public Transport Drivers** than are narrow travel lanes
- turn lanes separate turning vehicles from the through traffic, potentially reducing rear-end collisions
- medians separate opposing traffic streams
- greater sight distances generally improve a **Public Transport Driver's** ability to "see and be seen", thereby providing greater opportunity to avoid collisions
- street lighting improves overall visibility

In addition to these traditional, auto oriented engineering designs, there are also design features that are desirable for other travellers, but which also have safety benefits for motorists. For example, bike lanes and planting strips, which buffer pedestrians from traffic, also improve **Public Transport Drivers'** safety by increasing sight distance and by reducing the potential for conflicts between autos, bicycles, and pedestrians. Minimizing conflicts provides the **Public Transport Drivers** potential travel time savings and increased safety.

2.2 STREET DESIGNS TO CATER TO THE NEEDS OF PEDESTRIANS

The manual should not be limited only to traditional approach to street design, which defines pedestrian needs as:

- Simply a sidewalk
- The ability to safely cross the street.

These are, indeed, crucial to creating a safe walking environment. However, pedestrians expect and need more than just "walking space" to feel safe and comfortable. In order to support and encourage walking as an attractive and viable travel mode, the street designs in the proposed manual should reflect that pedestrian expectations that:

- help shorten walking distances
- separate (or buffer) pedestrians from moving traffic
- create aesthetically pleasing surroundings and amenities
- protect pedestrians from the elements
- let them walk as safely as possible

In addition, some special pedestrian populations may have other, specific concerns and their needs must also be considered. For example, safe crossings for blind pedestrians may require a different set of design features than those for pedestrians in general. Many individual design elements can provide for any one of the general categories of pedestrian expectations described

above. However, effectively encouraging more pedestrian travel typically requires a combination of several design elements, since the pedestrian is reacting to the overall walking environment.

For walking trips other than for pure recreation, this means that a walk-able environment includes a mix of land uses in close enough proximity to walk comfortably between them. People are much more likely to walk to a given destination if walking distance is minimized or if they perceive that the distances are not too long. Providing the right types of land uses and design characteristics, therefore, can influence perceived distance. Creating direct connections between land uses can also minimize distance.

The Manual may deal with design elements that create better connections these may include:

- short blocks with marked intersections
- safe mid-block crossings on longer blocks
- Continuous walkway systems that connect door fronts with transit stops or other destinations

Buffering pedestrians from passing cars also increases their comfort, even if they already have their own “walking space”. Pedestrians generally find sidewalks with some sort of buffer more attractive than sidewalks built right next to moving traffic. Several design elements can help to create suitable buffers between pedestrians and traffic, including but not limited to:

- planting strips
- bicycle lanes
- landscaping
- On-street parking

These elements may be used alone or in combination. The “correct” combination of these elements will depend on the space available, the various stakeholders’ expectations, the land use context, and the objectives for the street.

Security is also an important consideration, since pedestrians will feel more vulnerable than motorists in many circumstances. A pedestrian’s sense of security is improved by:

- Providing street lighting and pedestrian scale lighting, and increasing pedestrian visibility from adjacent land uses (by placing windows/doors/“eyes on the street”).

Urban design in the proposed manual should attempt at enhancing a pedestrian’s sense of security. The numbers and types of traffic conflicts to which pedestrians are exposed also affect personal safety. It should emphasize reduction of the number of conflicts faced by a pedestrian through:

- Managing driveway access to minimize and control the locations of turning cars
- Providing median or corner pedestrian refuge islands, which help to break up a crossing into more easily manageable parts

The manual may also deal with provisions to minimize overall distance (or time) over which the pedestrian must deal with potential conflicts by:

- reducing the number of travel lanes
- providing curb extensions
- designing smaller curb radii
- Providing sufficient signal timing so that pedestrians do not feel “trapped” in an intersection.

Conflicts between pedestrians and vehicles are not limited to motor vehicles, but also occur with bicycles. Cyclists travelling the wrong way in mixed traffic or on the sidewalk are particularly dangerous, because they are travelling faster than pedestrians, but they are less visible and make less noise than motor vehicles.

The manual may also address the design elements that help provide the space for buses to operate which include:

- wide travel lanes
- wide corner turning radii
- Street signs, utility poles, and on-street parking located to maximize clearance for side mirrors, and Adequate merging distances.

Bus drivers also want to reduce the potential for conflict between buses and other travellers. In addition to minimizing driver fatigue, reducing such conflicts can also help minimize schedule delays, which harm bus operations and performance.

The manual may address steps to minimize conflicts by:

- Selecting safe locations for bus stops
- Providing signal priority for transit vehicles

Bus riders have the same types of interests as do other pedestrians, with some additional, specific expectations. Bus riders also want:

- accessible bus stops
- easy connections
- Personal comfort and security while waiting for the bus

2.3 STREET DESIGN TO CATER TO THE NEEDS OF BICYCLISTS

Bicyclists have different perspectives or expectations related to their trips. Those expectations will vary according to the type of cyclist and the type of trip. Cyclists who are commuting to work will typically take the shortest, most direct route.

Either way, bicyclists of all kinds generally want:

- a well-connected network of bicycling facilities
- safe travel routes
- direct travel routes

The manual may address the development of dedicated bicycle network that connects neighbourhoods, schools, parks, and other activity for bicycling to become a viable travel mode in specific Indian cities. Direct routes may have to be considered through both a continuous network of local streets and through bike lanes on higher-volume streets. Short blocks help to create the dense network necessary for direct routes and lower-volume route options.

On higher-volume, higher-speed streets, provision of a bike lane may be considered for cyclists' safety and comfort. The width of the bike lane should be considered in the manual for:

- the minimum width for a designated bike lane
- Width where the bike lane is next to parked cars or on steep, uphill grades, since the cyclist may need room to avoid opening car doors or to pedal uphill (which can cause “wobbling”).

The variety of design elements that may be considered, in the manual, for improving bicyclists' visibility, including, but not limited to:

- designated bike lanes
- pavement markings
- street lighting
- bike boxes and bike signals at intersections
- Buffers from travel lanes and parked cars

The manual may also deal with minimizing of conflicts of cyclists with cars, buses, and pedestrians through reducing driveway frequency in commercial areas and providing bike lanes. also It should address special types of problems faced by bicyclists travelling through intersections, since they must operate their bikes as vehicles, but they are smaller and more vulnerable than the other vehicles. At intersections, it is particularly important that bicyclists be visible to both motorists and pedestrians.

The manual should consider design elements that improve cyclists' visibility at intersections to include but not limited to:

- bike lanes that are located appropriately in relation to the vehicle turn lanes
- lead signal indicators (which provide a head start and allow bicycles to clear the intersection ahead of motor vehicle traffic)
- bicycle stop bars (which provide similar advantages as the lead signal indicators)
- bike boxes, which require a bike lane leading to the intersection never run parallel to the direction of travel
- pavement markings carefully assessed for potential slickness

2.4 STREET DESIGN TO CATER TO ADJACENT LAND USES

The manual should also consider, in the proposed designs, the interest of other people who have a stake in how streets are designed. These include residents, business owners, property managers, and employees. Either way, these stakeholders will all want to feel safe and secure, to have access to their property, and to enjoy an aesthetically pleasing environment. These will likely see the following design elements as beneficial:

- lighting
- safe and contained travel ways
- driveways (for access to their properties)
- Trees and landscaping

These “stationary” stakeholders' perspectives are an important consideration when deciding which street design elements should be included:

- traffic calming devices
- low design speeds
- safe and convenient pedestrian
- crossings
- Reduced street widths
- In residential and institutional zones, reducing the noise from motor vehicles may also be important.

APPENDIX 2.8: TOR FOR TRAFFIC ENGINEERING FOR PUBLIC TRANSPORT

1. BACKGROUND

Economic boom in the country, rapid urbanization and unprecedented rise in the growth of motor vehicles has resulted in traffic congestion, delays in travel times, air and noise pollution. Urban transportation systems are wilting under the ever growing demands on inadequate street network, serpentine queues, pathetically packed suburban trains and the scarcity of taxis during rush hours puts a pressure on the mass transit system. Traffic management is the application of sound management principles to optimize the use of existing road network with a view to improving traffic flow and road safety without impairing the environmental quality. Provision of new infrastructure is both long term and capital intensive, resources may not be available to match the ever growing demand. The feasible recourse available therefore is to identify and implement improvement measures to optimize existing facilities resulting in improved accessibility and mobility with satisfactory level of safety. With this in view the MoUD proposes to get a manual developed on implementation measures in traffic engineering for public transport.

2. SCOPE OF WORK

The scope of work would be to develop a manual comprising guideline for traffic management techniques, including but not limited to the following:

2.1 REGULATORY TECHNIQUES

The coverage of procedures, guidelines and methods concerning these techniques would include:

- One way streets
- Reversible streets
- Reversible lanes
- Turning movement restrictions
- Closing streets

2.2 TRAFFIC CONTROL DEVICES

- Important requirements of Traffic Control Devices
- Classification:
- Traffic signs
- Road markings
- Traffic signals
- Miscellaneous traffic control devices

2.3 TRAFFIC SEGREGATION TECHNIQUES

- Vehicle – vehicle segregation techniques
- Pedestrian-Vehicle segregation
- Time segregation

2.4 DEMAND MANAGEMENT TECHNIQUES

- Parking controls
- Road and Bridge Tolls
- Road pricing
- Odd-even auto traffic restraint
- Staggering office hours

2.5 BUS PRIORITY TECHNIQUES

- Priority maneuvers
- Bus lanes
- Bus precincts
- Bus priority signal system
- Bus operations management system

2.6 SELF ENFORCING TECHNIQUES

- Central dividers
- Railings
- Parabolic dividers
- Chanelisers
- Queue channels
- Parking notches
- Bus bays
- Bus boxes

2.7 POLICE – PUBLIC INTERACTION TECHNIQUES

- Large Displays
- Variable message signs
- Electronic hoardings
- Mobile messages
- Seminars and Talks
- Traffic exhibitions

3. APPROACH

The manual should incorporate the method of identification of problems. It should explain steps towards correct diagnosis of problems and to arrive at usefulness of a particular technique. More often than not, the problem may shift to the adjacent locality, or an entirely new problem is resulted as a consequence of the very technique used as a solution. The manual should therefore dwell on the fact seeking solutions in a combination of techniques, even in a relatively local situation, for effective management. It should incorporate observing a solution as a part of the total scenario and the systems approach to prepare a Traffic Management System plan for the bigger network. The manual should include adequate illustrations, graphics, sketches and pictures to explain the concepts, designs, and details for implementation of appropriate solutions.

- The language used in the manual should be simple and crisp. The content, solutions proposed, examples and illustrations should be appropriate to conditions prevailing in India. These manuals in addition to appropriate text should be rich in their graphical content, illustrations, and photographs

- The content should include case studies and templates for designs wherever necessary
- The drafts/scripts of the manual will be presented before the Focus group for evaluating their content, adequacy, clarity, and effectiveness

The traffic management schemes can hardly be successful without the active participation and acceptance of the public. Wherever public contact is proposed, the designs and content of instruments of public communication should be detailed. These may include (a) large displays, (b) leaflets, (c) periodical press notes, (d) T.V and radio broadcast, (e) traffic exhibitions and (f) mobile messages. Wherever necessary video clips should also form a part of the manual.

APPENDIX 2.9: ToR for Intelligent Transportation Systems for Public Transport

1. BACKGROUND

Intelligent Transportation Systems (ITS) would greatly help in making Indian urban transport systems more efficient, less congested, safer and less polluting. Although ITS deals with areas involving the application of advanced technologies such as information and communication technologies, it addresses these from a transportation point of view. There is a felt need for preparation of manual on development and implementation of ITS systems for public transport. This manual is expected to accomplish the following:

- Explain the cooperative approach to ITS development, planning and implementation
- Provide assistance in dealing with multidisciplinary nature of ITS
- Assisting the transportation community in bridging the gap between transportation and system engineering
- Promotes the development and deployment of smarter ITS
- Helps stakeholders (traffic and transportation professionals from Central, State and Local Governments; consultants; transportation planning and traffic engineering students, people representing special interest groups such as environmentalists, bus companies, road transport corporations, trucking industry etc.) to consider, prepare and deliver effective input to ITS development process.

With this in view the Ministry of Urban Development proposes to get a manual on development and implementation of ITS systems including area traffic control.

2. SCOPE OF WORK

The scope of work would be to develop a manual with due consideration to:

- Varying perceptions of ITS technology capabilities
- Future proofing: Measures of effectiveness and future flexibility and growth
- Expandability: coverage in the manual for aspects related to options for future expansion of both geographical coverage and system capabilities
- Successful integration of ITS technologies
- Incorporating existing systems

The categories of ITS to be addressed by the proposed manual are:

- Advanced Public Transportation Systems (APTS)
- Advanced Traffic Management Systems (ATMS)
- Advanced Traveler Information Systems (ATIS)
- Commercial Vehicle Operations (CVO)

The content of the manual should comprise guidelines for ITS systems in a city, including but not limited to the following:

2.1 ITS NEEDS MODEL

The coverage of procedures, guidelines and methods concerning the needs model would include:

- Initial needs, objectives, problems and issues
- ITS objectives statements
- ITS vision
- ITS user services

2.2 ITS SOLUTIONS MODEL

- Inventory of existing and planned systems and transportation initiatives within the sphere of influence of ITS project for an Indian city
- Inventory listing existing resources
- Logical framework – optimum grouping of processes and data flows
- Multi criteria evaluation for interaction of ITS technologies, products and services for ultimate implementation
- Financial and commercial analysis

2.3 ITS DESIGN

- Use and incorporation of relevant standards
- Systemic, structured development
- Testing of designs
- Maintainability

2.4 ITS PROCUREMENT STRATEGIES

- Buyer/ Vendor system
- Design, bid, build
- Build, operate, transfer
- Impact of procurement procedures on design and implementation

2.5 AREA TRAFFIC CONTROL (ATC) SYSTEM

- number of signals in a particular area interlinked in a way that any signal timing change is dependent on conditions at other intersections
- Sensors/detectors embedded in the road.
- single linked pair
- linear group
- complete network
- Traffic surveillance function to detect traffic in locations such as pedestrian crossings
- Device control functions for devices
- Traffic control information provided to other elements of the ITS, i.e., variable speed limit
- Display devices, traffic management centre etc.

2.6 PRE-TRIP TRAVEL INFORMATION TO ASSIST TRAVELERS IN MAKING MODE CHOICES, TRAVEL TIME ESTIMATES, AND ROUTE DECISIONS PRIOR TO TRIP DEPARTURE:

- Travel services information: transit schedules, fares etc.
- Information on current transportation situations: road closure, construction information, incidents, etc.
- Trip planning services such as transit routes and transfer points
- Information access alternatives for users from home, work and public stations

2.7 EN ROUTE DRIVER INFORMATION TO PROVIDE INFORMATION TO VEHICLE DRIVERS WHILE EN ROUTE.

- Driver advisory functions that generate advisory information, such as areas to avoid due to
- Congestion, for en route drivers
- In-vehicle signing capability to assist drivers with information such as detour information, road
- Conditions, tourist attractions and resort areas etc.

2.8 ROUTE GUIDANCE TO PROVIDE TRAVELERS WITH DIRECTIONS TO SELECTED DESTINATIONS.

- Directions, current traffic conditions, status of transit systems, schedule of transit systems, etc.
- Real-time video modes for issuing travel information, such as current road conditions, to travelers.

2.9 FLEET MANAGEMENT

- GPS based system for on-line and off-line vehicle location

The manual should include adequate illustrations, graphics, sketches and pictures to explain the concepts, designs, and details for implementation of appropriate ITS applications.

- The language used in the manual should be simple and crisp. The content, solutions proposed, examples and illustrations should be appropriate to conditions prevailing in India. These manuals in addition to appropriate text should be rich in their graphical content, illustrations, and photographs
- The content should include necessary case studies and templates for designs
- The drafts/scripts of the manual will be presented before the Focus group for evaluating their content, adequacy, clarity, and effectiveness

APPENDIX 2.10: ToR for Travel Demand Management

1. BACKGROUND

In Indian cities the strategies to manage travel demand are getting more critical to transportation operations than strategies to increase capacity (supply) of facilities. The inability to easily and quickly add new infrastructure coupled with the growth in passenger and freight travel have led to the need for those involved with transportation system management at centre, state and to pay more attention to managing demand. There is a felt need to provide alternatives to single occupancy commuter travel to save energy, improve air quality, and reduce peak period congestion. Today, managing travel demand has broadened to encompass the desire to optimise transportation system performance for commute and non-commute trips and for recurring as well as non-recurring events.

Growth in population, number of vehicles and travellers, freight, and development has affected travel demand and reshaped travel patterns. Managing travel demand now occurs at shopping malls, tourist sites, employment areas, and special events such as the Commonwealth Games. The need to manage demand can occur in the middle of the day, evenings, or on weekends. Demand-oriented approaches are needed to address the transportation issues created by growth and the variability in demand for use of the systems.

The Ministry of urban Development (MoUD) therefore proposes to get a Travel demand management (TDM) manual developed. This manual needs to target factors that affect how and when individuals choose to travel, such as price, convenience and awareness of alternatives to driving alone. The manual needs to cover TDM strategies, which increase the people-moving capacity of the transportation system by:

- Increasing vehicle occupancy (e.g. the number of people per car, van or bus)
- Increasing the use of transportation choices (e.g. bicycle, walking that require less road infrastructure)
- Reducing the size of vehicles (e.g. substituting bicycle commuting for auto trips)
- Spreading out the demand for travel (e.g. shifting travel to off-peak time periods)

The manual should be designed to give policymakers and other stakeholders a basic understanding of TDM programs and useful tools for choosing when and how to use TDM instead of and/or in conjunction with increasing road capacity. It will provide the details to enable operations-oriented agencies to make demand management a key strategy to meet their operations needs.

2. SCOPE OF WORK

The scope of work would be to develop a manual covering related aspects of Travel Demand Management, including but not limited to:

2.1 MANAGING DEMAND THROUGH TRAVEL INFORMATION SERVICES

- Managing Commuter Travel Through Traveler Information
- Using Traveler Information to Manage Demand in Predictable Settings
- Work zones
- Planned special events
- Tourism

- Parking management
- Managing Less Predictable Situations Through Traveler Information
- Major road incidents
- Adverse weather
- Hurricanes and other planned evacuations
- Unforeseen catastrophic events (earthquakes, terrorist attacks)
- Future Directions of Traveler Information and Implications for Managing Travel Demand

2.2 EMPLOYER PROGRAMS

Commuter Choice:

Commuter Choice is to be considered as an initiative-encouraging employer to offer a broad range of commuting options to their employees. This means expanding the choices available for employees to get to and accomplish their work, whether they are transportation options such as public transportation, bicycles, carpools, modified work schedules, or technology options such as telecommuting that change how work is done.

- A government/business/community partnership designed to motivate employers to offer commuter choices
- A voluntary initiative motivating employers to offer a broader range of commute options to employees through services, work options, benefit programs or other business decisions
- A benefit to employees that enhances their quality of life by making “getting to work” easier, more affordable, and more employee-friendly (i.e., sensitive to commute and lifestyle demands and needs)
- A benefit to communities to help achieve livability, sustainability, and mobility
- The manual needs to describe a conceptual framework focused on the key components of Commuter Choice:
 - Mode Choice
 - Time Choice
 - Location Choice
 - Route Choice

2.3 VOLUNTARY TDM PROGRAMS

Several factors can motivate employers to voluntarily initiate commuter programs. Commuting costs take a big bite out of employee pay checks. Lack of convenient commuting options constrains the available pool of quality employees that a company can draw from. Some employers, recognizing the societal costs of traffic congestion and excessive travel and their contribution to this problem can take a leadership role in crafting innovative solutions.

2.4 MANDATORY TDM MEASURES

The manual may cover the necessary provisions requiring employers and developers to implement programs and policies to reduce commuting travel. It may provide that it may be mandatory for employers with more than a certain number of employees.

2.5 PUBLIC-PRIVATE PARTNERSHIPS

These public-private partnerships can fill a niche between regulatory measures, which the business community typically abhors, and voluntary employer programs, which tend not to keep pace with the growing congestion problem.

2.6 PARKING MEASURES

- Mandatory Parking cash outs:

At many employment sites, employees are provided free parking but not offered an equal financial contribution should they choose to bus, carpool or bike to work. Parking cash-out gives employees the cash equivalent of any parking subsidy presently provided by their employer.

- Parking Discounts for High Occupancy Vehicles (HOV's)
- Multi-modal Parking Programs
- Bicycle racks, lockers and changing facilities.

2.7 INNOVATIVE TDM SOLUTIONS

- Strategies to reduce automobile travel at particular times and places, and create pedestrian oriented streets
- Creating vibrant downtowns, business districts, urban villages, and other mixed-use activity centers
- Creating more connected roadway and path networks
- Locating common destinations close together to increase accessibility and transport diversity

2.8 INFORMATION DISSEMINATION BY CONCERNED URBAN TRANSPORTATION AGENCIES

Perceived commuting options are strongly affected by the information provided by various concerned agencies. These agencies, working with radio and television broadcasters, to some extent, in India, are providing commuters with information on traffic conditions. Today, in addition to news about expected delays on different freeways, commuters can access real-time information via the internet, PDAs or cell phones about bus service, air quality conditions and bicycle routes, thus expanding their travel options. At a more subtle level, the vision articulated by various government agencies of possible future transportation systems influences cultural norms for travel.

2.9 ENABLING PROGRAMS / IMPLEMENTING MECHANISMS

- Least-cost Planning
- Integrating TDM into the Transportation Planning Process
- Outcomes Analysis/feedback
- TDM Regulations

2.10 INCREASED ATTRACTIVENESS OF ALTERNATIVES TO SPORTS UTILITY VEHICLES (SUV'S)

- Bus Savings (time)
- Bus Savings (Rs.)
- Transferability/Convenience of Bus Fare Medium
- Transit Deregulation
- Guaranteed Ride Home Programs (GRH)

- Convenient Child Care Facilities
- Bicycling Amenities
- Pedestrian Improvements
- Auto-Free Zones

2.11 FLEXIBLE WORK ARRANGEMENTS / TELECOMMUTING

- Flexible Work Arrangements
- Telework

2.12 SUPPORTING STRATEGIES - INFORMATION AND MARKETING

- Marketing Campaigns
- On-site bus pass sales
- Regional Ride matching/Web Ride matching
- Company Vehicle Management
- TDM Promotion at Worksites

2.13 FINANCIAL INCENTIVE/ DISINCENTIVES TO BE RECOMMENDED IN THE MANUAL

Incentives:

- Transportation Allowance (Urban)
- Transportation Allowance/Pay-not-to-park Incentive (Suburban)
- Bus Pass Discounts for Employers
- Alternative Transportation Incentives
- Tax-Free Transit Benefits
- Carpool/Vanpool Subsidy
- Live Near Work or Transit Incentives
- Unbundling User Costs (refers to turning the fixed costs of commuting into variable costs)
- Variable road pricing used to reduce peak-period vehicle trips.
- Vehicle fees and taxes based on a vehicle's mileage.

Disincentives:

- Road Pricing
- High Fuel Taxes

2.14 SHORT-TERM LAND USE CHANGES

- Park-n-Ride Facilities
- HOV Priority - Lanes, Ramp Bypasses, Traffic Signals

2.15 TDM BY GEOGRAPHICAL EMPHASIS

- Regional
- Suburban
- Corridor
- School-based
- Special Events
- Air Quality/Energy Focus
- Neighbourhood-based

APPENDIX 3.1: ToR for Strengthening of IUT

- (To be inserted in Section 5 of RFP)

Consultancy Services for Strengthening of Institute of Urban Transport (India)

Project Consultancy – 1(PC-1)

1. BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The Ministry of Urban Development (MoUD) has been appointed as the nodal agency for the implementation of this project. The SUTP objectives are to be achieved through the implementation of following three components:

- The first component is targeted towards National Capacity Development in Urban Transport and has a funding allocation of USD 9.5 Million;
- The second component aims at preparation and implementing green transport demonstration projects in participating cities, with a project cost of USD 184.07 Million; and
- The third component of this project to provide support for management of the project with an allocation of USD 2.45 Million.

Component 1 of GEF-SUTP comprises tasks required for capacity building in the field of sustainable urban transport. The National Capacity Development Initiatives will help the governments at the Central, State and city levels to strengthen the core functions necessary for the efficient administration of Urban Transport.

It promotes building sustainable capacities in urban transport by enhancing the knowledge, skills and productive aptitudes of the organizations / employees involved in the field of urban transport in the context of reforms necessitated by globalization, democratization, the information revolution and changing technologies. The component is subdivided into following 5 sub-components:

- **Sub-Component 1:** Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);
- **Sub-Component 2:** Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;
- **Sub-Component 3:** Selection and preparation of Manuals and Toolkits; which is therefore subdivided into two parts namely:
 - **3a.** Needs assessment and identification of Manuals and Tool kits; and
 - **3b.** Preparation of Manuals and Tool kits
- **Sub-Component 4:** Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and
- **Sub-Component 5:** Technical assistance to cities to address emerging issues encountered during project implementation.
-

2. OBJECTIVE of this CONSULTANCY

The objective of this consultancy is to provide technical assistance to MoUD in implementation of sub-component-1, which aims at strengthening the IUT to undertake independent planning, development, operation, education, research and management activities and also to organize lectures, seminars, workshops, conferences, etc. on subjects pertaining to sustainable urban transport. The strengthening of IUT is in keeping with the objectives of NUTP which is 'to plan for sustainable urban transport and establish knowledge management system to serve the needs of all urban transport professionals, such as planners, researchers, teachers, students, etc'.

The expected outcomes of the strengthening process are to:

- Establish an effective forum and a focal point for all relevant stake holders for facilitating the development of state of art sustainable urban transport systems;
- Establish a sustainable capacity to educate and train professionals in accordance with the requirements of the urban transport in the country. Conducting courses on sustainable urban transport for officers and administrative staff of Central/ State and Local Governments;
- Provide all necessary support services and infrastructure to IUT members and other stakeholders;
- Identify adequate mechanisms for funding of IUT so that IUT's functions and services are established and sustained;
- Create a national database on the status, policies, standards, specifications, travel behaviour, demand generation, multi modal technology, environmental and social aspects of urban transport for policy and planning decision support; and
 - *Develop an enabling mechanism in IUT for providing technical advice to the Central, State and Local Governments and other agencies.*

3. SCOPE of WORK

In the context of the objectives stated above, this consultancy has to be undertaken in two stages. At first, a Business Plan for IUT has to be prepared taking into consideration its present status and future goals. The second stage will involve implementation of the Business Plan. The general scope of work in each stage is described in the following section.

-
- Stage I : Preparation of the Business Plan for IUT

The Business Plan should address, but not necessarily be limited to the following aspects:

- Assessment and estimation of the manpower and infrastructure requirements of the IUT;
- Creation and maintenance of a Knowledge Management Center, consisting of National Urban Transport Information Centre (NUTIC) and a library with a publishing wing;
- Building research capabilities;
- Setting up Training and Capacity Building Activities;
- Making IUT a national centre for education in Urban Transport, laying particular emphasis on application oriented education;
- Providing a Platform for Sharing and Dissemination of Information; and
- Prepare a sustainable financial plan for the IUT.

The consultant will undertake detailed discussion with the members, management and the concerned staff of the IUT and prepare the Business Plan so that the document presents the actual needs of the institute towards meeting the objectives of the SUTP. The Business Plan

should also include the long term vision, the medium term (over next 10 year) development strategy and the short term (in next 5 year) action plan for IUT.

-
- Stage II : Implementation of the Business Plan
- Based on the suggestions given in the Business Plan, the Consultant will undertake to implement the short term (next 5 year) action plan with emphasis on the following:
 - Set up a fully functional NUTIC, library and publishing Wing;
 - Setup a research wing ;
 - Design and publish journal and newsletter;
 - Review and update the Memorandum of Association of IUT; and
 - Undertake procurement of the manpower and infrastructure required for the activities listed from a-d.

4. DETAILED SCOPE OF SERVICES

The detailed scope of the services would include:

STAGE I : Preparation of Business Plan

Task 1: Review the present activities and capacities available at the IUT

The focus of this activity will be to identify and collect all necessary information regarding the current state of IUT. It would include review of all relevant documents, consultations and detailed discussions with members and management of the IUT. ..

Task 2: Creating a Knowledge Management Centre (KMC)

Since IUT is to be developed as a national store house for all urban transport sector related information, creation of a knowledge management centre is a necessary requirement. This centre is to include a data management centre, which has been conceptualised as the National Urban Transport Information Centre (NUTIC) in the DPR prepared by CIRT along with a full fledged library and a publishing wing. In this context, the following subtasks need to be addressed by the Consultants

- **Subtask 1:** Review and refine the plan already prepared for establishment of NUTIC and prepare a detailed action plan for implementation over the next 5 years;
- **Subtask 2:** Identify short, medium and long term functions of NUTIC and the services to be provided by NUTIC.
- **Subtask 3:** Regular update of the database will be one of the important tasks of the NUTIC. The consultant would have to identify data to be collected and updated, best source of data, most reliable method for obtaining the same and also the frequency at which each data item needs to be collected keeping in mind its utility and the cost of its collection;

Subtask 4: Establishing a fully functional library: As a part of the KMC, it is envisaged to set up a fully functional Library on Urban Transport and related subjects. The collection would include not only Books but also National and International Journals and Periodicals, Project Reports, Study Reports, Manuals, Tool Kits and all other such material. The library is to provide a single window for accessing relevant text and reference material, particularly by Professionals, Students, Planners and Researchers, in the field of Urban Transport with an e-catalogue on website with appropriate linkages. In this context, the consultant is required to undertake the following:

- *Identify the books required to be procured, keeping in view the books already available with IUT, and prepare an updated list.*
- *Identify other publications to be procured (manuals, journals, news letters and tool kits etc. along with their sources).*

Subtask 5: Setting up a Publication Wing: Publishing of journals and newsletter is an important tool for information dissemination by a knowledge based organization. Therefore, under GEF-SUTP establishment of a publication wing in/of IUT has been proposed to be established. Consequently, the Consultant shall undertake the following:

- Design the SUTP newsletter; identify its contents and sources of information, including important activities undertaken or planned in the field of urban transport;
- Design an annual journal to be published by IUT, which may include occasional working papers based on fundamental or applied research carried out on various topics of wider applications related to urban mobility; and
- Estimate the staff requirement for undertaking, coordinating and managing the publication activity as an ongoing function of IUT.
-
- **Subtask 6:** Identify the human and infrastructure resources required for establishment of the KMC;
- **Subtask 7:** Prepare a detailed implementation and organization plan for KMC incorporating scope of work for the appointment of the experts required to set up the centre and also procurement plan for the procurement of infrastructure.
- **Subtask 8:** Prepare guidelines for management and financially sustaining the centre and Identify sources of revenue to make the centre financially sustainable.
- **Subtask 9:** Prepare detailed annual cost estimates for capital and O&M expenditure for the next 5 years.

Task 3: Strengthening Research Capabilities

To develop IUT as a premier research organisation to lead the research activities in the field of urban transport, its capacities need to be augmented to undertake such activities successfully. To achieve the same the Consultant shall undertake following activities:

- **Subtask 1:** Assess and identify gaps between the research needs and research presently being carried out;
- **Subtask 2:** Critically review the present research work to understand the mismatch if any that exist between area of research currently in progress and its applicability to solving the urban transportation problems;
- **Subtask 3:** Identify 2 prospective areas for research and the personnel required for undertaking research and also, identify sponsors for the same.

Task 4: Training and Capacity Building Activities

Subtask 1: Identify areas in which training activities can be/needs to be undertaken;

Subtask 2: Design the training programs to cater to the training needs based on the Training Needs Assessment (TNA) done by The Energy and Resources Institute (TERI);

Subtask 3: Identify regional training centres such as the State Institute of Public Administration or other training institutes, where the training programmes can be undertaken; and

Subtask 4: Estimate the staff required for coordinating and managing training activity.

Task 5: Assessment of Resource Requirement of IUT

- This will include assessment of infrastructure, manpower and training requirements of the staff.

Subtask 1: Assessment of Infrastructure Requirements

- *Assess the scale and level of the state of the art infrastructure required to make it self-contained in all aspect of its operations keeping in mind the programs and activities to be undertaken by it; and*
- *List and provide specifications of training equipments, computer hardware and software required for efficient functioning of the institute and the procurement plan for these should be prepared.*

Subtask 2: Assessment of Manpower Requirements

- *Assess the manpower requirement of the institute on the basis of present and proposed activities of the IUT and propose a staffing structure; and*
- *Prepare an action plan*
 - i. *Detailing the professional qualifications and experience requirements of staff needed to be hired;*
 - ii. *Identify constraints such as availability, feasibility and affordability of the right kind of professionals; and*
 - iii. *Based on the finding of the above identify and assess the alternative options for procurement of the required staff. These options may include (a) recruitment by IUT, (b) preparing a roster of available experts, and their engagement on a fee basis and (c) outsourcing work to consultants, or a combination of these etc.*

Subtask 3: Assessment of Training requirement of IUT staff at various levels

- *Assessment of training needs of the staff at different levels;*
- *Prepare a structured training schedule by identifying need for training including foreign training in order to provide best output in an Institute which will deliver international quality research and studies, especially for the R&D staff and*
- *Scheme and the training module/format will be recommended for each category of staff.*

Task 6: Prepare a Detailed Cost Estimate

Subtask 1: The consultant will prepare a detailed cost estimate for all activities identified above for the strengthening the IUT. These would cover both the capital and recurring costs;

Subtask 2: Prepare annual revenue and expenditure requirements over the short term covering the initial five years; and

Subtask 3: Prepare revenue and expenditures estimates for the medium term of next ten years.

Task 7: Prepare a Detailed Financial Plan

Subtask 1: Identify various sources of funds for financing the institute to meet its capital and operations cost so as to make it self sustaining;

Subtask 2: Explore and identify various sources of financing which may include but not be limited to:

- Grants from MoUD for providing support and services;
- Fee for conducting training programs for officers and staff of Central, State and Local governments. This fee may come from the provisions made in their respective training policies;
- Membership fee ;
- Fee to be charged for providing services/ information / data to any organization whether government or non-government.

STAGE II Implementation of Business Plan

During this stage the consultant is required to provide all assistance in actual implementation of some of the proposal of the Business Plan, viz. Setup the KMC and bring it to fully functional level and carry out all the activities till completion of consultancy period; initiate research activities; assist in appointment and training of the staff at IUT and review the MOU of IUT. Thereafter making it possible for the IUT staff, recruited and trained for various activities to independently continue the functioning of the activities established.

The implementation of the Business will include the following activities:

Task 1: Establishing a fully functional Knowledge Management Centre

Subtask 1: Collection of Transport Data;

- *Draft the format for data collection and storage;*
- Identify and collaborating with any existing agency already collecting the data in the transport sector;
- Develop mechanism for data retrieval; and
- Collect data from 2 sample cities, mutually agreed upon with the Project Management Unit (PMU) and feed it into the center.
- **Subtask 2:** Assist IUT in setting up a functional library;
- **Subtask 3:** Develop the e-portal and make it functional;
- **Subtask 4:** Set up a Publication Wing and provide assistance in publishing a total of 6 quarterly newsletters and two annual journals during the consultancy period.
- **Subtask 5:** Assist IUT to hire the staff required for the functioning of the KMC as well as in procuring equipments and software, having it installed and commissioned; and
- **Subtask 6:** Train the KMC staff in the management of the KMC.

Task 2: Initiate Research Activities

- **Subtask 1:** Setup a mechanism for coordinating research activities; and
- **Subtask 2:** Assist IUT in appointment of the required staff for coordinating the research activities and also obtain resources for undertaking research activities.

Task 3: Training and Capacity Building Activities

Assist IUT in the appointment and training of the required staff for handling and continuing the training activities in the future.

Task 4: Review of Memorandum of Association of IUT

- The consultant should review the Memorandum of Association of IUT, understand and make suitable suggestions taking into account the proposed business plan.

Task 5: Procure a site for Housing the institute

Options for proper accommodation for housing the institute should be explored and these may include (a) contacting the established institutes to provide adequate accommodation from its surplus space; (b) taking space on rent in planned commercial areas; or (c) allotment of land to institute from amongst land available for setting up institutions, with the government etc.

5. DELIVERABLES and TIME FRAMES

The consultant shall commence work within a week of signing of the contract and shall complete the assignment within a period of 22 months. The table 1 lists the deliverables and their respective time frames and the detailed work plan has been given in table 2.

Table 1: Deliverable and Time Frame

S. No.	Deliverables	Time Frame (Months from the date of signing of the contract)
	Stage 1: Preparation of the Business Plan	
1.	Inception Report: Covering updated methodology and work plan	1
2.	Draft Business Plan	6
3.	Final Business Plan after incorporating comments of all concerned	8
	Stage 2: Implementation of the Business Plan	
4.	Procurement of manpower and infrastructure	12
5.	Assist in publishing the 3 Newsletters and 1 Journal	13
6.	Collection of Transport Data from 2 sample cities	15
7.	Set up fully functional KMC (Including NUTIC and Library cum Publishing wing)	19
8.	Set up fully functional research wing and publishing the remaining 3 newsletters and one journal	22
	Total	22

Along with the deliverables listed in the table above the consultant shall also submit a monthly progress report. All the reports being submitted to the client are to be supplied in 6 (five) hard Copies, along with a CD/diskette comprising relevant electronic copies.

6. PAYMENT SCHEDULE

The payment schedule for the above-discussed work is given below in Table 3.

Table 3: Payment Schedule

Milestone	Payment %
Project Initiation and Start up	5
Submission of Inception Report	5
Submission of Draft Business Plan	15
Submission of Final Business Plan	15
Procurement of Manpower and infrastructure	15

Setting up of a fully functional KMC with trained staff and development of SUTP e-portal	20
Publishing of Journals/Newsletters (remaining 3 newsletter and 1 journal)	15
Successful Completion of Consultancy	10

7. STAFFING

The suggested staffing requirement and work plan for the project has been outlined in Table 4 and 5

Table 4: Staffing Requirements

S. No.	Team Composition (Number required)	Min. Years of Professional Experience	Minimum Qualification/Area of Experience	Required Person Months
1.	Team Leader cum Institutional Development Expert (1)	20	The Team Leader should have at least a Master's degree in economics or planning or other related social sciences. She/he should be an expert in development planning and has experience in designing, implementing, monitoring and/or evaluating institutional building interventions/ operations. Knowledge of transportation operations is desirable. The ideal candidate will have working experience with multi-lateral funding agencies. Experience of working in the fields of project design, development and approval processes, including familiarity with relevant GoI rules and regulations are highly desirable. Knowledge of GoI institutional aspects (including central and local government systems) and World Bank/UNDP rules, regulations and policies would be an added advantage.	22
2.	Urban Transport Expert (1)	10	The Urban Transport Expert shall have a technical background in Transportation engineering (Masters degree in Civil Engineering, Traffic Engineering, etc.) with work experience in Transportation of at least 10 years The ideal candidate will have a good understanding of Sustainable Urban Transportation.	15
3.	Financial Expert (1)	10	The candidate shall be Chartered Accountant or having a post graduate degree in financial management as an education qualification. He/She should have 8 to 10 years experience as a financial adviser particularly in the field of project financing. Advisory experience in the field of transportation project would be desirable.	8
4.	IT Expert (1)	10	The candidate should have B. Tech (IT) / MCA degree. He/She would have expertise in hardware design and integration. His expertise would also include data communications and operating systems, real time data acquisition and processing and distribution.	16
5.	Training Expert(1)	15	The candidate shall have a Masters degree with a minimum of 15 years of training experience in the transportation sector. The ideal candidate would have experience in designing of training programs, designing and development of training support materials and implementing training programs.	8
6.	Library Expert (1)	10	The candidate shall have a M.Lib degree with a minimum of 10 years of experience. The ideal candidate would have experience in designing of e-catalogue, identifying and sourcing journals of repute in the transportation sector.	10

Table 5: Work Plan

Activities \ Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Inception Report: Covering updated methodology and work plan																							
Prepare a Draft Business Plan																							
Prepare a Final Business Plan																							
Hiring of Accommodation for IUT																							
Procurement of Infrastructure																							
Hiring of required staff and their Training																							
Design and assist in publishing of newsletters and journals																							
Collection of Data from 2 cities																							
Setup fully Functional Library and Publication Wing																							
Make KMC Fully Functional																							
Run the Fully Functional KMC for 2months																							
Start Research on the selected areas																							
Set up Fully Functional Research Wing																							

APPENDIX 3.2: ToR for Training and Skill Development Programs

(To be inserted in Section 5 of RFP)

Consultancy Services to Implement Training & Skills Development Programmes

Project Consultancy- 2 (PC-2)

1. BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The Ministry of Urban Development (MoUD) has been appointed as the nodal agency for the implementation of the project. The SUTP objectives are to be achieved through the implementation of following three components:

- The first component is targeted towards National Capacity Development in Urban Transport and has a funding allocation of USD 9.5 Million;
- The second component aims at preparation and implementing green transport demonstration projects in participating cities, with a project cost of USD 184.07 Million; and
- The third component of this project to provide support for management of the project with an allocation of USD 2.45 Million.

Component 1 of GEF-SUTP comprises tasks required for capacity building in the field of sustainable urban transport. The National Capacity Development Initiatives will help the governments at the Central, State and city levels to strengthen the core functions necessary for the efficient administration of Urban Transport.

It promotes building sustainable capacities in urban transport by enhancing the knowledge, skills and productive aptitudes of the organizations / employees involved in the field of urban transport in the context of reforms necessitated by globalization, democratization, the information revolution and changing technologies. The component is subdivided into following 5 sub-components:

Sub-Component 1: Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);

Sub-Component 2: Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;

Sub-Component 3: Selection and preparation of Manuals and Toolkits; This subcomponent is therefore subdivided into two parts namely:

3a. Needs Assessment and identification of Manuals and Toolkits; and

3b. Preparation of Manuals and Toolkits.

Sub-Component 4: Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and

Sub-Component 5: Technical Assistance to cities to address emerging issues encountered during project implementation.

2. OBJECTIVES of this CONSULTANCY

The objective of this consultancy is to build sustainable institutional capacity through building individual capacity in the Urban Transport sector. This is to be achieved by appointing a consultant to support, design and implement training and skill development program.

3. DETAILED SCOPE OF WORK

The scope of the consultancy services will be to identify training topics in consultation with MoUD and IUT and develop training material and undertake training and skills development programs for 500-600 professionals. Therefore, the consultancy period is being divided into 4 stages. Preparation of training material is to be done in the first stage while training programs are to be undertaken in the second stage. In the third stage, the effectiveness of the training programme is to be evaluated followed by a detailed project report to be prepared in the fourth and final stage. The detailed scope of the services would therefore include:

STAGE I: Preparation of Training Support Materials

Task 1: Identification of Training topics and subjects in consultation with IUT and MoUD

Task 2: Development of suitable training material on subject areas identified. The training material in addition to appropriate text should be rich in their graphical content, illustrations, and photographs. The content should include case studies and objective questionnaires to make the training more interactive. The drafts/scripts of the training material will be presented before the Focus Group² for evaluating their content, adequacy, clarity, and effectiveness.

Task 4: The training kit should include:

- Trainers' and participants' manual;
- Tools for group instruction like PowerPoint presentations, flip charts and overhead bromides; and
- Short videos of not more than 10 minutes duration to complement the training manuals.

Task 4: Revise the content of the training material to incorporate the feedback received from the Focus group.

Task 5: The Consultant shall compile and make available all the training material as part of training kit as well as in soft copies as CDs.

STAGE II: Undertake Training Programmes

Task 1: Training the Trainers

- *The consultant should identify the trainers to be trained under the programme and also the institute where the training programmes can be carried out;*
- *Undertake 2 training programs of ten days duration each for providing training to 10 trainers per session at an institution, identified in consultation with MoUD.; and*

² The MoUD would constitute a Focus Group with representation from IUT, Administration and Finance wing of the Ministry and Training experts. They will periodically meet to review and monitor the progress of this Consultancy and provide guidance towards its effectiveness and applicability.

A set of pre-training assignments will be provided to the trainers in order to ensure that they understand the training material prepared for undertaking training of the staff of urban transport development agencies.

Task 2: Training of Officers/Staff of Key Urban Transport Development Agencies: This activity would consist of training programs of varying durations for different groups of trainees. MoUD will assist in arranging nomination of trainees from various urban transport development agencies. The training of trainees would have three modules as follows:

- **Module I:** 3 courses of 3 days duration for up to 20 trainees each selected from the decision makers level, viz. Secretaries, Commissioners, Directors etc.
- **Module II:** 3 courses of 5 days duration for up to 30 trainees each at senior & middle management level, viz. Chief Engineers etc.
- **Module III:** 8 courses of one week duration for up to 50 trainees from the Cutting Edge level i.e. Consultants, planner and other professionals working in the field of urban transport

The pedagogy for all the modules would be to cover the relevant topics out of those provided in **Annex 1**, and comprise:

- class room lectures;
- presentation of case studies;
- group discussions; and
- field visits

The consultant will provide faculty to oversee the delivery of first round of each type of training by the trained trainers. This faculty would also address the weaknesses in the trainers, identified from the feed back received from the training programs. Further training, if necessary, will be provided to the trainers exhibiting deficiencies in performance.

Note: *The financial proposal of the consultant shall include estimated cost of residential course fees to be incurred for conducting the training sessions including institute's fee and boarding and lodging arrangements for trainers as well as trainees*

STAGE III: Evaluation of Effectiveness of Training Programmes

Task 1: The consultant shall frame a monitoring and evaluation mechanism and criteria with the focus group prior to implementation of training programs; and

Task 2: Prepare an evaluation report based on the data gathered during the training programmes with the monitoring and evaluation mechanism stating the overall effectiveness of the program and making recommendations, including revised tools as necessary for future training delivery.

The report will be reviewed by the Focus Group for evaluating the content, adequacy, clarity, and effectiveness.

STAGE IV: Preparation of a Detailed Report

The Consultant shall prepare a detailed project report on the activities undertaken during the consultancy period. The report will also include details such as:

- (a) list and contact details of participants of each training program,
- (b) proceedings during the programs including interventions from the participants, group discussions and group presentations/ reports;

- (c) A long-term action plan for continuing training to the officers/staff of the Key Urban Transport Development Agencies; and
- (d) Suggestions for enhancing the effectiveness of the future programs

4. DELIVERABLES and TIME FRAMES

The consultant shall commence work within a week of signing of the contract and shall complete the assignment within a total of 20 months. The table 1 lists the deliverables and their respective time frames and the detailed work plan has been given in table 2. Along with the deliverables listed in the table below the consultant shall also submit a monthly progress report.

Table 1: Deliverable and Time Frame

S. No.	Deliverables	Time Frame (Months from the date of signing of the contract)
1.	Inception Report: Covering updated methodology and work plan	1
2.	Training Support Material	10
3.	Training of the Trainers	12
4.	Training of the Trainees	19
6.	Evaluation Report	19
6.	Detailed Project Report	20

Table 2: Work Plan

Activities / Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Inception Report																				
Develop Training Support Material																				
Identify Training Institutes and Trainers																				
Obtain Nominations of Prospective Trainers and Send Lol to them																				
Organize Training of Trainers																				
Obtain Nominations of Prospective Trainees																				
Organize Training of Trainees																				
Prepare Evaluation Report																				
Detailed Project Report																				

All the reports submitted to the client will be supplied in six hard Copies, along with a diskette comprising relevant electronic copies.

It must be noted that the copyright for all the manuals, toolkits, guidelines, training modules, trainers' kit and other intellectual property created as a part of this project will vest exclusively with the Government of India (MoUD) which would be free to use all such material, without restrictions, in any of its training programs or for any other purposes.

5. PAYMENT SCHEDULE

The payment schedule for the above-discussed work has been detailed out in Table 3.

Table 3: Payment Schedule

Milestone	Payment %
Project Initiation and Start-up	5
Inception Report	5
Development of Training Material	15
Training of Trainers	25
Training of Trainees	20
Evaluation Report	15
Final Report (along with final material)	15

6. STAFFING

The suggested staffing requirement and schedule required for the project has been outlined in Table 4.

Table 4: Qualification & Experience

Position	Man Mont hs	Years of Professional Experience	Specific Experience
1. Team Leader cum Training Specialist	20	10 years	The Training Specialist shall have a degree with a minimum of 10years of experience in the training in transportation sector and training of trainers. The ideal candidate would have experience in designing of training programs, designing and development of training support materials and implementing training programs.
2. Urban Planning Specialist (1)	12	10 years	The Urban Planning Specialist shall have a technical background in Urban Planning (Masters degree in planning) and work experience in Transportation at least 10 years of experience in formulating and generating urban transport projects and policies. The ideal candidate will have a good understanding of the comprehensive mobility planning approach encompassing technical, economical, financial, social and environmental aspects and also in imparting training in these areas.
3. Urban Transportation Engineering Specialist (1)	12	10 years	The Urban Transportation Engineering Specialist shall have a technical background in Transportation engineering (Masters degree in Civil Engineering, Traffic Engineering, etc.) with work experience in Transportation of at least 10 years The ideal candidate will have a good understanding of the Urban Transportation and also in imparting training in these areas.
4. Urban Transport Planning Specialist (1)	12	10 years	The Urban Transport Expert shall have a technical background and work experience of at least 10 years The ideal candidate will have a good understanding of Sustainable Urban Transportation. Experience in project management would be desirable.

Annex 1: Indicative List of Training Topics

1.	Preparation of Comprehensive Mobility Plan
2.	Integrated Land-use and Transportation Planning
3.	Non Motorized Travel Characteristics and Planning
4.	Alternative Analyses for Major Urban Transport Investments
5.	Environmental and Social Issues in Urban Transport
6.	Safety Aspects of Urban Transport
7.	Development of Intelligent Transport Systems (ITS) in a city
8.	Implementing Low Cost Traffic Management Improvement Measures
9.	Public Transport <ul style="list-style-type: none"> a. Characteristics of Different Modes b. Network and Service planning, Development, Management, and Operations c. Contracting for Service Provision d. Pricing (Fare setting) e. Operation and Maintenance Costing f. Financial Planning g. Marketing
10.	Travel Demand Characteristics, analysis and Estimation
11.	Travel Demand Management (TDM)
12.	Transport Finance and Economics
13.	Public Private Partnerships (PPPs) for Urban Transport Investments
14.	Accounting for the needs of vulnerable populations in urban Transport
15.	Communication and Stakeholder Participation

APPENDIX 3.3: ToR for Needs Assessment of Manuals and Tool kits

(To be inserted in Section 5 of RFP)

Consultancy Services for Needs Assessment and Identification of Manuals and Toolkits

Project Consultancy – 3a (PC-3a)

1. BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) under operational policy OP11 of GEF to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The Ministry of Urban Development (MoUD) has been appointed as the nodal agency for the implementation of the project. The SUTP objectives are to be achieved through the implementation of following three components:

- The first component is targeted towards National Capacity Development in Urban Transport and has a funding allocation of USD 9.5 Million;
- The second component aims at preparation and implementing green transport demonstration projects in participating cities, with a project cost of USD 184.07 Million; and
- The third component of this project to provide support for management of the project with an allocation of USD 2.45 Million.

Component 1 of GEF-SUTP comprises tasks required for capacity building in the field of sustainable urban transport. The National Capacity Development Initiatives will help the governments at the Central, State and city levels to strengthen the core functions necessary for the efficient administration of Urban Transport.

It promotes building sustainable capacities in urban transport by enhancing the knowledge, skills and productive aptitudes of the organizations / employees involved in the field of urban transport in the context of reforms necessitated by globalization, democratization, the information revolution and changing technologies. The component is subdivided into following 5 sub-components:

Sub-Component 1: Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);

Sub-Component 2: Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;

Sub-Component 3: Selection and preparation of Manuals and Toolkits; which is therefore subdivided into two parts namely:

3a. Needs assessment and identification of Manuals and Tool kits; and

3b. Preparation of Manuals and Tool kits

Sub-Component 4: Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and

Sub-Component 5: Technical assistance to cities to address emerging issues encountered during project implementation.

2. OBJECTIVE of this CONSULTANCY

The objective of this consultancy is to assess the need and identify relevant manuals and toolkits which require to be prepared under this project. This is to be done by reviewing the available manuals/toolkits in the field of urban transport, inclusive of those being prepared under other projects and the material already available internationally, identify the gaps and suggest a list of manuals and toolkits which need to be prepared as also the ToRs for the consultants to be appointed to undertake the task of preparing the manuals and toolkits.

3. DETAILED SCOPE of WORK

Task 1: Needs Assessment and Identification of Manuals and Toolkits

Based on group discussions held during the formulation of this project, ten possible subject areas (refer **Annex 1**) have been identified wherein there is a need for preparation of manuals/toolkits under GEF-SUTP. The Consultant shall carry out a comprehensive review of the available and under preparation urban transport manuals/toolkits (both nationally as well as internationally) to avoid the possibilities of duplication of subject areas as also to identify the absence of such manuals/toolkits in certain other subject areas. Review of internationally available manuals/toolkits should be carried out keeping in mind their applicability to this country

The output of these activities will be in the form of a detailed review report of all the available and under preparation manuals and toolkits.

Task 2: Drafting of ToRs for Preparation of Manuals and Toolkits

Based on the outputs of Task 1, the Consultant shall draft the TORs for the preparation of each manual/toolkit. The ToRs should include detail scope of work, time schedule, qualification requirements for key professionals, their time inputs, list of deliverables and delivery schedule.

The output of these activities will be in the form of a Final list and ToRs for the preparation of manuals and toolkits.

Task 3: Preparation of Detailed Project Report

The Consultant shall prepare a detailed project report on the activities undertaken during the consultancy period.

4. DELIVERABLES and TIME FRAMES

The consultant shall commence work with in a week of signing of the contract and shall complete the assignment with in a total of 6 months. Table 1 lists the deliverables and their respective time frames and the detailed work plan has been given in Table 2. Along with the deliverables listed in the table below the consultant shall also submit a monthly progress report.

Table 1: Deliverable and Time Frame

S. No.	Deliverables	Time Frame (Months from the date of signing of the contract)
1.	Inception Report: Covering updated methodology and work plan	0.5
2.	Review Report on Manuals and Toolkits	2
3.	Draft ToRs for preparation of Manuals and Toolkits	4
4.	Final ToRs	5
5.	Detailed Project Report	6
	Total	6

Table 2: Work Plan

Activities \ Months	1	2	3	4	5	6
Inception Report: Covering updated methodology and work plan						
Review Report on Manuals and Toolkits						
Draft ToRs for preparation of Manuals and Toolkits						
Final ToRs						
Detailed Project Report						

All the reports being submitted to the client are to be supplied in 6 (six) hard Copies, along with a CD/diskette containing relevant electronic copies.

5. PAYMENT SCHEDULE

The payment schedule for the above-discussed work is given below in Table 3.

Table 3: Payment Schedule

Milestone	Payment %
Project Initiation and Start up	5
Submission of Inception Report	5
Submission of Review Report on Manuals and Toolkits	20
Submission of Draft ToRs for preparation of manuals and Toolkits	30
Submission of Final ToRs for preparation of manuals and Toolkits	20
Detailed Project Report	20

6. Key Professionals

The suggested key professionals in the consultant team, their desirable qualifications and inputs required for the project has been outlined in Table 4.

Table 4: Suggested Key Professional Requirements

S. No.	Team Composition (Numbers required)	Min. Years of Professional Experience	Minimum Qualification/Area of Experience	Required Person Months
1.	Team Leader cum Transportation Planner(1)	15	The candidate must have a Masters degree or equivalent in Transportation planning with minimum 15 years of experience in Urban Transport planning and research. Experience in planning transportation studies inclusive of network analysis, demand analysis, operations and management of transport systems is essential. The candidate must be conversant with the latest analysis and planning tools and should have good communication and writing skills.	6
2.	Transportation Engineering Specialist(1)	10	The candidate must have a Masters degree or equivalent in Traffic engineering with minimum 10 years experience in planning and research. Experience in planning, operations and management of transport systems is essential. The candidate must be conversant with the latest analysis and design tools and should have good communication and writing skills.	4
3.	Urban Planner(1)	10	The candidate shall have a Masters degree in Urban Planning and 10 years of work experience of which at least 5 years experience in formulating and generating urban transport projects and policies. The candidate should have a good understanding of the comprehensive mobility planning approach encompassing technical, economical, financial, social and environmental aspects and should also have good communication and writing skills..	4
4.	Environmental Specialist(1)	10	The candidate should have Masters degree or equivalent in environmental science or in related other disciplines with minimum 10 years of experience of which at least 3 years on environmental impact assessment urban transport projects. The candidate must be conversant with the World Bank's guidelines, procedures and operational policies/directives. Experience of working as environmental expert in at least two World Bank or any multi-lateral funded projects is required. The candidate should also have good communication and writing skills	4

Annex 1

Proposed Subject Areas for Preparation of Manuals and Toolkits

S. No.	Blocks	Subjects areas for Preparation of Manual and Toolkits
1.	Comprehensive Mobility Planning	<ol style="list-style-type: none"> 1. Land-use and Transport: Macro Planning 2. Environmental Considerations in Urban Transport Planning 3. Environmental Assessment
2.	Detailed Project Reports	<ol style="list-style-type: none"> 1. Sustainable Urban Transport Data Collection and Management 2. Environmental Impact Assessment
3.	Planning and Design	<ol style="list-style-type: none"> 1. Pedestrian-friendly and Public Transport-friendly Site Planning 2. Urban Street Design for Promoting Public and Non-Motorized Transport
4.	Operations Management	<ol style="list-style-type: none"> 1. Traffic Engineering for Public Transport 2. Intelligent Traffic System (ITS) for Public Transport 3. Travel Demand Management

APPENDIX 3.4: ToR for Preparation of Manuals and Tool kits

(To be inserted in Section 5 of RFP)

Consultancy Services for Preparation of Manuals and Toolkits

Project Consultancy – 3b (PC-3b)

1. BACKGROUND

The Government of India (GoI) has applied to the Global Environment Facility (GEF) under operational policy OP11 of GEF to implement Sustainable Urban Transport Project (SUTP) in India to ensure that environmental considerations are taken into account in the application of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in India's urban transport systems in favour of sustainable development. The Ministry of Urban Development (MoUD) has been appointed as the nodal agency for the implementation of the project. The SUTP objectives are to be achieved through the implementation of following three components:

- The first component is targeted towards National Capacity Development in Urban Transport and has a funding allocation of USD 9.5 Million;
- The second component aims at preparation and implementing green transport demonstration projects in participating cities, with a project cost of USD 184.07 Million; and
- The third component of this project to provide support for management of the project with an allocation of USD 2.45 Million.

Component 1 of GEF-SUTP comprises tasks required for capacity building in the field of sustainable urban transport. The National Capacity Development Initiatives will help the governments at the Central, State and city levels to strengthen the core functions necessary for the efficient administration of Urban Transport.

It promotes building sustainable capacities in urban transport by enhancing the knowledge, skills and productive aptitudes of the organizations / employees involved in the field of urban transport in the context of reforms necessitated by globalization, democratization, the information revolution and changing technologies. The component is subdivided into following 5 sub-components:

Sub-Component 1: Institutional Capacity Development, focusing on strengthening the Institute of Urban Transport (IUT);

Sub-Component 2: Individual Capacity Development through training of trainers and of a group of about 1000 professionals at national, state, and city levels;

Sub-Component 3: Selection and preparation of Manuals and Toolkits; This subcomponent is therefore subdivided into two parts namely:

3a. Needs assessment and identification of Manuals and Toolkits; and

3b. Preparation of Manuals and Toolkits

Sub-Component 4: Promotion, raising-awareness, and dissemination of information to expand and enhance the impacts of the GEF-SUTP; and

Sub-Component 5: Technical assistance to cities to address emerging issues encountered during project implementation.

2. OBJECTIVE of this CONSULTANCY

The objective of this consultancy is to prepare manuals and toolkits on the identified subjects in accordance with the ToRs provided.

3. DETAILED SCOPE of WORK

The detailed scope of the services would include:

Task 1: Preparation of Draft Manuals and Toolkits

Subtask 1: The consultant shall undertake the preparation of draft manuals and toolkits on the identified subject areas according to the ToRs provided. The same shall be shared and discussed with the Focus Group³ identified for SUTP by MoUD for their review and comments. The draft manuals and toolkits will then be modified as suggested by the Focus Group; and

Subtask 2: Conduct 2 (two) workshops of two days each at locations decided by the PMU (consisting of about 50 stakeholders in each) to present and discuss the draft manuals and toolkits prepared. Feedback/suggestions on the manuals and toolkits received from the stakeholders during the workshops shall be documented.

The outputs of these activities will be in the form of draft copies of all the manuals and toolkits prepared and a workshop report.

Task 2: Preparation of Final Manuals and Toolkits

Subtask 1: The consultant shall prepare final manuals/toolkits after duly incorporating the suggestions received from the Focus Group and feedbacks / suggestions received during the workshops conducted; and

Subtask 2: Convert the manuals and toolkits into training modules and conduct at least four training sessions (one for each block) in collaboration with some well known institutes.

The outputs of these activities will be in the form of final copies of all the manuals and toolkits, training modules in electronic copy version and report on all the training sessions conducted.

Note: *The financial proposal of the consultant shall include estimates of all costs to be incurred for conducting the proposed number of workshops and training sessions.*

Task 3: Preparation of Detailed Project Report

The Consultant shall prepare a detailed project report on the activities undertaken during the consultancy period.

³ The MoUD would constitute a Focus Group with representation from IUT, Administration and Finance wing of the Ministry and Training experts. They will periodically meet to review and monitor the progress of this Consultancy and provide guidance towards its effectiveness and applicability.

4. DELIVERABLES and TIME FRAMES

The consultant shall commence work within a week of signing of the contract and shall complete the assignment within a period of 18 months. Table 1 lists the deliverables and their respective time frames and the detailed work plan has been given in Table 2. Along with the deliverables listed in the table below the consultant shall also submit a monthly progress report.

Table 1: Deliverables and Time Frame

S. No.	Deliverables	Time Frame (Months from the date of signing of the contract)
1.	Inception Report: Covering updated methodology and work plan	1
2.	Draft Manuals and Toolkits	10
3.	Workshop Report	12
4.	Final Manuals and Toolkits after incorporating comments received during the workshops and from the focus group	15
5.	Training Report	17
6.	Detailed Project Report	18

Table 2: Work Plan

Activities \ Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Inception Report: Covering updated methodology and work plan																		
Draft Manuals and Toolkits																		
Conduct Workshop and prepare Report																		
Final Manuals and Toolkits after incorporating comments received during the workshops and from the focus group																		
Conduct Training and Prepare Report																		
Detailed Project Report																		

All the reports being submitted to the client are to be supplied in 6 (six) hard Copies, along with a CD/diskette comprising relevant electronic copies.

It must be noted that the copyright for all the manuals, toolkits, guidelines, training modules, trainers' kit and other intellectual property created as a part of this project will vest exclusively with the Government of India (MoUD) which would be free to use all such material, without restrictions or cost, in any of its training programs or for any other purposes.

5. PAYMENT SCHEDULE

The payment schedule for the above-discussed work is given below in Table 3.

Table 3: Payment Schedule

Milestone	Payment %
Project Initiation and Start up	5
Submission of Inception Report	5
Submission of Draft Manuals and Toolkits	25
Submission of Workshop Report	15
Submission of Final Manuals and Toolkits	25
Submission of Training Session Report	15
Detailed Project Report	10

6. KEY PROFESSIONALS

The suggested key professionals in the consultant team, their desirable qualifications and inputs required for the project has been outlined in Table 4. This is liable to be modified by the Consultants appointed for undertaking Subcomponent 3a.

Table 4: Suggested Key Professional Requirements

S. No.	Team Composition (Numbers required)	Min. Years of Professional Experience	Minimum Qualification/Area of Experience	Required Person Months
1.	Team Leader cum Urban Transportation Planning Specialist(1)	15	The candidate must have a Masters degree or equivalent in Transportation planning with minimum 15 years of experience in Urban Transport planning and research. Experience in planning transportation studies inclusive of network analysis, demand analysis, operations and management of transport systems is essential. The candidate must be conversant with the latest analysis and planning tools and should have good communication and writing skills. .	18
2.	Urban Planning Specialist(1)	10	The candidate shall have a Masters degree in Urban Planning and 10 years of work experience of which at least 5 years experience in formulating and generating urban transport projects and policies. The candidate should have a good understanding of the comprehensive mobility planning approach encompassing technical, economical, financial, social and environmental aspects and should also have good communication and writing skills..	15
3.	Urban Traffic Engineering Specialist(1)	10	The candidate must have a Masters degree or equivalent in Traffic engineering with minimum 10 years experience in planning and research. Experience in planning, operations and management of transport systems is essential. The candidate must be conversant with the latest analysis and design tools and should have good communication and writing skills.	15
4.	ITS Expert(1)	5	The candidate should have a degree in Engineering/Science with an experience of not less	5

S. No.	Team Composition (Numbers required)	Min. Years of Professional Experience	Minimum Qualification/Area of Experience	Required Person Months
			than 5 years of which two years of experience in the implementation of ITS in transportation sector. The candidate should be familiar with the technical designs and standards adopted for Intelligent Transportation System in urban transportation.	
5.	Environmental Specialist(1)	7	The candidate should have Masters degree or equivalent in environmental science or in related discipline with minimum 7 years of experience of which at least 3 years on environmental impact assessment of urban transport projects. The candidate must have full knowledge of the World Bank's guidelines and procedures. Experience of working as environmental expert in at least two World Bank or any multi-lateral funded projects is required.	10
6.	Social Specialist(1)	7	The candidate should have Masters or equivalent qualification in social sciences or in related discipline with minimum 7 years experience out of which at least 3 years experience of working as social/resettlement expert for major urban transport projects. The candidate must have full knowledge of the World Bank's guidelines and procedures and must have worked as social/resettlement expert on at least two World Bank funded projects.	5
7.	Institutional / Training Specialist(1)	10	The candidate should have at least a Master's degree in economics or planning or other related social sciences. She/he should be an expert in development planning and has experience in designing, implementing, monitoring and/or evaluating institutional building interventions/ operations. The candidate shall also have a minimum of 10 years of training experience in the transportation sector. The ideal candidate would have experience in designing of training programs, designing and development of training support materials and implementing training programs.	5
8.	Urban Design Specialist (1)	10	The candidate must have a technical background in Urban Designing or landscape architecture and 10 years of work experience in which at least 5 years of working in transportation sector.	1

APPENDIX 3.5: OUTLINE FORM FOR PROBLEM STATEMENTS

The present document has been framed to be used for problem statements by the Implementing Agencies (IAs). The format has been created to help the IAs present any technical problems they might face during the implementation of the demonstration projects. After the identification of the problem and the extent of assistance required the below given format can be filled in and sent to the PMU for their consideration and needful action.

I. Problem Title

The title should be no more than 10 words.

II. Problem Statement

In no more than three paragraphs, provide a general description of the problem or need.

III. Study Proposed and its scope

Provide a statement of the specific study proposed, how it relates to the general problem statement in Section II and, if possible, the study approach and the tasks envisioned.

IV. Cost and Time Frame Required

V. Expected Benefits and Outcomes

VI. Persons(s) Developing the Problem

Provide the specifics (i.e., name, title, address, telephone, and fax numbers) for the person(s) who developed the problem.

VII. Date and Submitted By

Provide the specifics (see Section VI) of the person(s) who submitted the problem and the date of submission.

The document should be addressed to the National Project Manager, PMU, GEF-SUTP.

APPENDIX 4.1: COST ESTIMATES FOR IUT STRENGTHENING

S. No	Description	No.	Experience (Years)	Man Months	Salary	(Rs) Total Cost	GEF	GOI
Project Preparatory Consultancy								
1	Team Leader cum Institutional Development Expert	1	15-20	22	600000	13200000		13200000
2	Training Expert	1	15	8	300000	2400000		2400000
3	Urban Transport Expert	1	10	15	300000	4500000		4500000
4	Financial Expert	1	10	8	300000	2400000		2400000
5	IT Expert	1	10	16	500000	8000000		8000000
6	Library Expert	1	10	10	500000	5000000		5000000
7	Rental (including, travel expenses)	1	4,00,000 per month for 14 months			5600000		5600000
8	Equipment Costs	1	Transport etc: @ Rs. 20,000/- per month for 14 months			280000		280000
9	Administrative Expenses	1	20% of Manpower Costs			6100000		6100000
10	Data collection					5000000		5000000
	Total					52,480,000		
S. No	Description	No.	Experience (Years)	Duration (Years)	Man Months	Total Cost in 4 years		
Knowledge Management Centre (KMC) (Indicative- the actual will be worked out by PC 1)								
1	Director	1	15-20	3		150000	5400000	5400000
2	Database Administrator	1	10-15	3		100000	3600000	3600000
3	Software Engineer	1	10	3		80000	2880000	2880000
4	Hardware Engineer	1	10	3		55000	1980000	1980000
5	Accounts Manager	1	10	3		45000	1620000	1620000
6	Data Entry Operator	2		3		20000	720000	720000
7	Clerical Assistant	1	5-7	3		25000	900000	900000
8	E-portal						150000	150000
9	Software	1					6335000	6335000
10	Hardware	1					18950000	18950000
11	Rent		Rs. 5,00,000/- per month				24000000	24000000
12	Equipment Costs	1	Tel, Fax, Courier, Stationary, Local Transport etc: @ Rs. 35,000/- per month for 4 years				1680000	1680000
13	Office Infrastructure		Tables, Chairs, Desktop, Laptop, Filing Cabinets, Scanner				3135000	3135000
14	Annual Maintenance		10% of Hardware + Rent				4295000	4295000
15	Administrative Expenses		20% of Manpower Costs				3420000	3420000
	Total						79,065,000	
S. No	Description	No.	Duration (years)			Total Cost in 4 years		
Publications								
1	Printing of Annual Journal		Per Annum			100000	400000	400000
2	SUTP News letters		4 per Annum			40,000	640000	640000
3	Dispatch of News letters & Journals					100000	400000	400000
4	Salary for head of publication division		per Month			60,000	2880000	2880000
5	Salary for publication helper		per Month			25,000	1200000	1200000
6	Fee to review committee		Rs.20,000/-per Month with				2880000	2880000
7	Office Infrastructure		Tables, Chairs, Desktop, Laptop, Filing Cabinets, Scanner				83800	83800
8	Administrative Expenses		20% of Manpower Costs				1392000	1392000
	Total						9,875,800	
S. No	Description	No.	Duration (years)			Total Cost in 4 years		
Research Activities								
1	Information cum Library officer	1	15-20	4		85000	4080000	4080000
2	New Books/Journals	4x5					2000000	2000000
3	Research Assistant	1		4		35000	1680000	1680000
4	Research Development Officer	1	15	4		85000	4080000	4080000
5	Equipment Costs						328000	328000
6	Administrative Expenses		20% of Manpower Costs				1968000	1968000
	Total						14,136,000	
							64,866,800	90,690,000
							67,500,000	67,500,000

APPENDIX 4.2: COST ESTIMATES FOR TRAINING & SKILL DEVELOPMENT PROGRAM

S. No	Description	No.	Experience (Years)	Duration (Months)	Man Months		Total Cost for 20 months	rest of project period	GEF	GOI
Project Consultancy										
1	Team Leader cum Training Specialist	1	15-20	20	20	600000	12000000			12000000
2	Urban Planning Specialist	1	15	20	12	300000	3600000			3600000
3	Urban Transportation Engineering Specialist	1	15	20	12	300000	3600000			3600000
4	Urban Transportation Specialist	1	7-10	20	12	175000	2100000			2100000
5	Rental1 (including hotel accommodation, travel expenses, per diem for professionals)		Rs. 1,20,000/- per twenty days				9800000	9800000	19600000	
6	Rental2 (including accommodation, travel, working lunch, per diem for trainers undergoing training)		Rs.50,000/- per trainer for 20 days multiplied by 20 trainers				1000000	1000000	2000000	
7	Remuneration for professionals for training of trainers		Cost @ Rs.3000/- per day, Rs.60,000/- per head for 20 days multiplied by 10 deliverer				600000	600000	1200000	
8	manual, participants manual, Pow erpoint instructions, and short videos to complement training manual)		Cost @ Rs.1000/- per training material for one hundred twenty sets				240000	240000	480000	
9.1	Training of Officers/Staff of Key Urban Transport Development Agencies		3 courses of 3 days duration for 20 trainees each				630000	630000	1260000	
9.2	Training of Officers/Staff of Key Urban Transport Development Agencies		3 courses of 5 days duration for 30 trainees				1575000	1575000	3150000	
9.3	Training of Officers/Staff of Key Urban Transport Development Agencies		8 courses of one week duration for Cutting Edge level				9800000	9800000	19600000	
9	Printing of Participants Manual		Cost @ Rs.300/- per participants manual for one 1200 participants				720000		720000	
10	Administrative Expenses		20% of Manpow er Costs				4260000			4260000
11	accommodation, airfare,etc		2,50,000 per month for 20 months				5000000			5000000
	subsequent Training of Trainees		Two training program of 16 weeks duration per Annum for 2 years @ Rs. 3000/- per day					384000	384000	
							54925000			
Training/ Workshops division at IUT										
1	Cost of Training by R&D staff		Training per head per day for 3 days (yearly twice) to 13 IUT employees			7,000	2184000		2184000	
2	Senior Coordinator			48		60,000	2880000		2880000	
3	Junior Coordinator			48		25,000	1200000		1200000	
4	Assistant			48		10,000	480000		480000	
5	Equipment Costs						128000		128000	
6	Administrative Expenses		20% of Manpow er Costs				1348800			1348800
7	accommodation, airfare,etc		50,000 per month for 48 months				2400000		2400000	
	Total						10,620,800			
	Total						54,925,000		57,666,000	31,908,800
									60,000,000	120,000,000

APPENDIX 4.3A: SELECTION OF MANUAL AND TOOL KITS

S. No	Description	No.	Experience (Years)	Duration (Months)	Man Months		Total Cost for 6 Months	GEF
Project Consultancy								
1	Team Leader cum Transportation Planner	1	15	6	6	500000	3000000	3000000
2	Transportation Planner / Transportation Engineering Specialist	1	10	6	4	300000	1200000	1200000
3	Urban Planning Specialist	1	10	6	4	300000	1200000	1200000
4	Environment Specialist	1	10	6	4	300000	1200000	1200000
4	Rental(including accommodation, airfare,etc)		4,00,000 per month for 6 months				2400000	2400000
5	Equipment Costs		20,000/- per month for 4 months				80000	80000
6	Administrative Expenses		20% of Manpower Costs				1080000	1080000
7	Total						10,160,000	10,160,000

APPENDIX 4.3B: PREPARATION OF MANUAL AND TOOL KITS

S. No	Description	No.	Experience (Years)	Duration (Months)	Man Months		Total Cost for 18 Months	GEF	GOI
1 Project Consultancy									
1	Team Leader cum Urban Transportation Planning Sp	1	15	18	18	500000	9000000		9000000
2	Urban Planning Specialist	1	10	18	15	300000	4500000		4500000
3	Urban Traffic Engineering Specialist	1	10	18	15	300000	4500000		4500000
4	ITS Expert	1	5	18	5	300000	1500000		1500000
5	Environmental Specialist	1	7	18	10	300000	3000000		3000000
	Social Specialist	1	7	18	5	250000	1250000		1250000
6	Institutional Specialist	1	10	18	5	300000	1500000		1500000
7	Urban Design	1	10	18	1	300000	300000		300000
8	Rental(including accommodation, airfare,etc)		7,50,000 per month for 18 months				13500000		13500000
9	Equipment Costs		Tel, Fax, Courier, Stationary, Local Transport etc: @ Rs. 20,000/- per month for 18 months				360000		360000
10	Administrative Expenses		20% of Manpower Costs				5110000		5110000
11	Printing of Manuals along with training material and interactive CDs		Cost @ Rs.1000/- per set for 250 sets of 10 manuals				2500000		2500000
	TOTAL						47020000		47020000
2	Printing of Manuals along with training material and interactive CDs by IUT		Cost @ Rs.1000/- per set for 750 sets of 10 manuals				7500000		7500000
	Total						54,520,000		54,520,000

Appendix 5.1: Selection of Project Consultant for the proposed GEF/World Bank/UNDP - Sustainable Urban Transport Project, India

EXPRESSION OF INTEREST

Background

The Government of India (GOI) has approached the Global Environment Facility, World Bank and UNDP to implement a Rs. 1100 crore Sustainable Urban Transport Project (SUTP) in India. The Ministry of Urban Development (MoUD) is to be the nodal agency to implement the SUTP. A Project Management Unit (PMU) has been setup under the MoUD to manage the project. The MoUD intends to procure the services of a Project Consultant (PC) in the implementation of SUTP. The PC will be funded by GOI and selection of consultant will follow GOI procurement procedures. The place of work for consultants will be in Delhi, though the consultants may be required to visit participating cities/states.

Broad Scope of Services

The services to be provided by the Consultant shall broadly include the following:

- To strengthen the existing Institute of Urban Transport (IUT) under the MoUD and transform it into a national importance by establishing Knowledge Management System, e-portal for urban transport planning, urban transport database maintenance, research initiatives, transportation journal, infrastructure and human resource development.

Eligibility Criteria

The Consultants who meet the following criteria are invited to submit their Expression of Interest.

- Firm with a minimum turnover of **USD 10 Million**
 1. Proven experience in institutional strengthening under large urban transport projects or related nature funded by multi-lateral agencies

Ministry of Urban Development invites eligible Consultants to indicate their interest in providing the consultancy services. Consultants may associate to enhance their qualifications. The period of Consultancy assignment shall be up to maximum of 14 months.

Short Listing

Consultants will be short listed on the basis of their past experience of handling similar types of projects/assignments, strength of their key personnel and financial strength of the consultants/firm, using the following weightages:

1. Past Experience -- 60 %
2. Experience of key personnel -- 25 %
3. Financial Strength -- 15 %

Consultants who secure a minimum of 60 % marks will be short listed. Only Indian national consultants or firms registered or incorporated in India shall be considered for short listing.

Submission Requirements

The interested Consultants are requested to submit the following information for proving their competence.

- A brief profile of Company
- Ownership and Organizational structure of Company.
- A reference/client list and description of assignments handled
- Curriculum Vitae of appropriate key professionals

Documents in sealed envelopes superscripted with the title "EOI for Project Consultancy for GEF/World Bank/UNDP-SUTP" must be delivered to the following address not later than <0000 hrs> on <DD/MM/YYYY>. Electronic submissions to the e-mail address given below are also acceptable.

National Project Director, GEF-SUTP

Ministry of Urban Development

Govt. of India,

Nirman Bhawan, Maulana Azad Road,

New Delhi -111 001

Tel 91-11-2306 1114

Fax: 91-11-2306 1102

E-mail: sklohia65@gmail.com

APPENDIX 5.2: REQUEST FOR PROPOSAL AND CONTRACT FORMAT

Section 1: Letter of Invitation

[File No. < >]

New Delhi

< November, 2008 >

< Name and Address of Consultant >

Dear Sir:

Sub: Consultancy Services for Project Management in the Implementation of SUTP in India

1. The Ministry of Urban Development (MoUD),(hereinafter called “Employer”) is implementing Sustainable Urban Transport Project(SUTP) through promoting long-term modal shift to more energy efficient modes of urban transport in India. This project aims to strengthen capacity of Government of India (GOI), participating states/cities of the project in planning, financing, operating, and managing sustainable urban transport systems. Apart from capacity building at national level in urban transport sector, the following 9 Indian Cities/States will be given assistance in preparing and implementing SUTP at city level.

Ahmedabad(Gujarat), Ajmer(Rajasthan), Hyderabad(Andhra Pradesh), Indore(Madhya Pradesh), Jalandhar(Punjab), Mysore(Karnataka), Naya Raipur(Chhattisgarh), Pune, Pimpri Chinchwad(Maharashtra), Thiruvananthapuram(Kerala).

The employer has invited Expression of Interests (EOIs) to be received in the office of MoUD by 31st Oct, 2008, to provide consultancy services for Project Management of SUTP as per short details mentioned therein. More details on the services are provided in the Terms of Reference in this RFP document. As your firm was short-listed based on your EOI, you are now invited to submit your proposal as per the attached RFP document.

2. An invitation to submit the proposal has been addressed to the following short listed firms. It is not possible to transfer this invitation to any other firm

i) -----

ii) -----

iii) -----

iv) -----

v) -----

3. A firm will be selected under Quality cum Cost Based Selection (QCBS) method and procedures described in this RFP.
4. The RFP includes the following documents:

Section 1 - Letter of Invitation

Section 2 - Instructions to Consultants (including Data Sheet)

Section 3 - Technical Proposal

Section 4 - Financial Proposal

Section 5 - Terms of Reference

Section 6 - Standard Form of Contract

5. We would appreciate if you inform us in writing at the following address upon receipt:

- Your acknowledgment of the receipt of this Letter of Invitation, and
- Whether you will submit a proposal alone / in association as a Joint Venture confirming joint and several liabilities / as Sub-consultants (Refer para 3 of instructions to consultants part 1).

Under Secretary (MRTS), UT Division
Ministry of Urban Development (Govt. of India)
Room No. 322 C, Nirman Bhavan,
Maulana Azad Road, New Delhi -110011
Tel: 91-11-2306 2594, Fax: 91-11-2306 2594.
E-mail: Sumit-d6@yahoo.com

Yours sincerely,

Sumit Chatterjee
Under Secretary (MRTS)

Section 2: Instructions to Consultants

Part I

1. Definitions

- (a) “Employer” means the Ministry/Department who has invited the bids for consultancy services and with which the selected Consultant signs the Contract for the Services and to which the selected consultant shall provide services as per the terms and conditions and TOR of the contract.
- (b) “Consultant” means any entity or person or associations of person who have been short listed to submit their proposals that may provide or provides the Services to the Employer under the Contract.
- (c) “Contract” means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is the General Conditions (GC), the project Specific Conditions (SC), and the Appendices.
- (d) “Project specific information” means such part of the Instructions to Consultants used to reflect specific project and assignment conditions.
- (e) “Day” means calendar day.
- (f) “Government” means the Government of India
- (g) “Instructions to Consultants” (Section 2 of the RFP) means the document which provides short-listed Consultants with all information needed to prepare their proposals.
- (h) “LOI” (Section 1 of the RFP) means the Letter of Invitation being sent by the Employer to the short-listed consultants.
- (i) “Personnel” means professionals and support staff provided by the Consultant or by any Sub-Consultant and assigned to perform the Services or any part thereof; “Foreign Personnel” means such professionals and support staff who at the time of being so provided had their domicile outside the Government’s country; “Domestic Personnel” means such professionals and support staff who at the time of being so provided had their domicile in India.
- (j) “Proposal” means the Technical Proposal and the Financial Proposal.
- (k) “RFP” means the Request for Proposal prepared by the Employer for the selection of Consultants, based on the SRFP.
- (l) “SRFP” means the Standard Request for Proposals, which must be used by the Employer as a guide for the preparation of the RFP.
- (m) “Assignment / job” means the work to be performed by the Consultant pursuant to the Contract.
- (n) “Sub-Consultant” means any person or entity with which the Consultant subcontracts any part of the Assignment/job.
- (o) “Terms of Reference” (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Employer and the Consultant, and expected results and deliverables of the Assignment/job.

2. Introduction

- 2.1 The Employer named in the Data Sheet will select a consulting firm/organization (the Consultant) from those to whom the LOI has been addressed, in accordance with the method of selection specified in the Data Sheet.
- 2.2 The name of the assignment/Job has been mentioned in Data sheet. Detailed scope of the assignment/job has been described in the Terms of Reference in Section 5.
- 2.3 The date, time and address for submission of the proposals have been given in Data Sheet.
- 2.4 The short-listed Consultants are invited to submit their Proposal, for consulting Assignment/job named in the Data Sheet. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Consultant.
- 2.5 Consultants should familiarize themselves with Local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment/job and Local conditions, Consultants are encouraged to meet the Employer's representative named in the Data Sheet before submitting a proposal and to attend a pre-proposal meeting if one is specified in the Data Sheet. Attending the pre-proposal meeting is optional. Consultants should contact the Employer's representative to arrange for their visit or to obtain additional information on the pre-proposal meeting. Consultants should ensure that these representatives are advised of the visit in adequate time to allow them to make appropriate arrangements.
- 2.6 The Employer will provide at no cost to the Consultants the inputs and facilities specified in the Data Sheet, assist the consultants in obtaining licenses and permits needed to carry out the Assignment/job, and make available relevant project data and reports.
- 2.7 Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Employer is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultants.

3. Eligibility of Association of consultants and Sub-Consultants

- 3.1 If the consultant had formed an association of consultants, each member of the association of consultant shall be evaluated as per the qualification/ eligibility criteria set forth in data Sheet. The combined score of the each member of the association of consultant shall be taken into account for evaluation purpose. If any member of the association of consultants is dropped at the RFP stage, such an association of consultants is liable to be rejected by the Employer. However, the Employer, at its sole discretion, may decide to evaluate short-listing of such a consultant association without considering the strength of the dropped member and if found eligible, may allow such association of consultant to submit their proposal.
- 3.2 A short-listed consultant may associate with consultants and /or individual expert at the time of submission of proposal. Under such circumstances, each member of the association of consultants shall be evaluated as per the qualification/ eligibility criteria set forth in the Data Sheet. The combined score of the each member of the association of

consultant shall be taken into account for evaluation purpose. However, the lead member of the association of the consultant shall be the consultant who has been short-listed by the Employer and employer shall deal with only the lead member for the purpose of this assignment. Although the contract shall be signed by all the members of the associations of the consultants, the lead member of the association of the consultant shall be responsible and liable to the Employer for every aspect of their proposal, contract etc.

4. Clarification and Amendment of RFP Documents

- 4.1 Consultants may request a clarification on any clause of the RFP documents up to the number of days indicated in the Data Sheet before the proposal submission date. Any request for clarification must be sent in writing, or by standard electronic means to the Employer's address indicated in the Data Sheet. The Employer will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Consultants. Should the Employer deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under Para. 4.2.
- 4.2 At any time before the submission of Proposals, the Employer may amend the RFP by issuing an addendum in writing or by standard electronic means. The addendum shall be sent to all Consultants and will be binding on them. Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Employer may, if the amendment is substantial, extend the deadline for the submission of Proposals.

5. Conflict of Interest

- 5.1 Employer requires that Consultants provide professional, objective, and impartial advice and at all times hold the Employer's interests paramount, strictly avoid conflicts with other Assignment/jobs or their own corporate interests and act without any consideration for future work.
- 5.2 Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

Conflicting activities: A firm that has been engaged by the Employer to provide goods, works or Assignment/job other than consulting Assignment/job for a project, and any of its affiliates, shall be disqualified from providing consulting Assignment/job related to those goods, works or Assignment/job. For the purpose of this paragraph, Assignment/job other than consulting Assignment/job are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.

Conflicting Assignment/job: A Consultant (including its Personnel and Sub-Consultants) or any of its affiliates shall not be hired for any Assignment/job that, by its nature, may be in conflict with another Assignment/job of the Consultant to be executed for the same or for another Employer. For example, a Consultant hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and a Consultant assisting

a Employer in the privatization of public assets shall not purchase, nor advice purchasers of, such assets.

Conflicting relationships: A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Employer's staff who is directly or indirectly involved in any part of preparation of the Terms of Reference of the Assignment/job, or selection process for such Assignment/job, or supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Employer throughout the selection process and the execution of the Contract.

- 5.3 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Employer, or that may reasonably be perceived as having this effect. Any such disclosure shall be made as per the technical proposal forms provided herewith. If the consultant fails to disclose said situations and if the Employer comes to know about any such situation at any time, it may lead to the disqualification of the Consultant during bidding process or the termination of its Contract during execution of assignment.
- 5.4 No agency or current employees of the Employer shall work as consultants under their own ministries, departments or agencies.

6. Unfair Advantage

If a short-listed Consultant could derive a competitive advantage from having provided consulting Assignment/job related to the Assignment/job in question and which is not defined as conflict of interest as per Para 5 above, the Employer shall make available to all short-listed Consultants together with this RFP all information that would in that respect give such Consultant any competitive advantage over competing Consultants.

7. Proposal

Short-listed Consultants may only submit one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified. However, this does not limit the participation of the same Sub-Consultant, including individual experts, to more than one proposal.

8. Proposal Validity

The Data Sheet indicates how long Consultants' Proposals must remain valid after the submission date. During this period, Consultants shall maintain the availability of professional staff nominated in the proposal and also maintain the financial proposal unchanged. The Employer will make its best effort to complete negotiations within this period. However, the Employer may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the professional staff nominated in the Proposal and their financial proposal remain unchanged, or in their confirmation of extension of validity of the Proposal, Consultants could submit new staff in replacement, which would be considered in the final evaluation for contract award. Under circumstances where Consultants refuse to extend the validity of their Proposals, the Employer shall not consider such proposal for further evaluation.

9. Preparation of Proposals

- 9.1 The Proposal as well as all related correspondence exchanged by the Consultants and the Employer shall be written in English language, unless specified otherwise.
- 9.2 In preparing their Proposal, Consultants are expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.
- 9.3 While preparing the Technical Proposal, Consultants must give particular attention to the following:
- (a) If a short-listed Consultant firm considers that it may enhance its expertise for the Assignment/job by associating with other Consultants in sub- consultancy, it may associate with a non-short-listed Consultant.
 - (b) The estimated number of Professional staff-months for the assignment/job is as shown in the Data sheet. However, the Proposal shall be based on the number of Professional staff-months or budget estimated by the Consultants. While making the proposal, the consultant must ensure that he proposes the minimum number and type of experts as sought by the Employer, failing which the proposal shall be considered as non-responsive.
- 9.4 Depending on the nature of the Assignment/job, Consultants are required to submit a Technical Proposal (TP) in the format provided with this RFP. The Data sheet indicates the formats of the Technical Proposal to be submitted. Submission of the wrong type of Technical Proposal will result in the Proposal being deemed non-responsive. The Technical Proposal shall provide the information indicated in the following Paras from (a) to (g). Form Tech – I in Section 3 is a sample letter of technical proposal which is to be submitted along with the technical proposal.
- (a) A brief description of the consultant's organization and in the case of a consortium/ joint venture, of each partner, will be provided in Form Tech-2. In the same Form, the consultant and in the case of a consortium/ joint venture, each partner will provide details of experience of assignments which are similar to the proposed assignment/ job as per the terms of reference. For each Assignment/job, the outline should indicate the names of Sub-Consultants/ Professional staff who participated, duration of the Assignment/job, contract amount, and Consultant's involvement. Information should be provided only for those Assignment/jobs for which the Consultant was legally contracted by the Employer as a corporation or as one of the major firms within a joint venture. Assignment/jobs completed by individual Professional staff working privately or through other consulting firms cannot be claimed as the experience of the Consultant, or that of the Consultant's associates, but can be claimed by the Professional staff themselves in their CVs. Consultants should be prepared to substantiate the claimed experience along with the proposal and must submit letter of award / copy o contract for all the assignments mentioned in the proposal.
 - (b) Comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the Assignment/job; and on requirements for counterpart staff and facilities including: administrative

support, office space, Domestic transportation, equipment, data, etc. to be provided by the Employer (Form TECH-3 of Section 3).

- (c) A description of the approach, methodology and work plan for performing the Assignment/job covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposals is provided under Form TECH-4 of Section 3. The work plan should be consistent with the Work Schedule (Form TECH-8 of Section 3) which will show in the form of a bar chart the timing proposed for each activity.
- (d) The list of the proposed Professional staff team by area of expertise, the position that would be assigned to each staff team member and their tasks to be provided in Form TECH-5 of Section 3.
- (e) Estimates of the staff input needed to carry out the Assignment/job needs to be given in Form TECH-7 of Section 3. The staff-months input should be indicated separately for each location where the Consultants have to work and / or provide their key staff.
- (f) CVs of the Professional staff as mentioned in Para 9.4 (d) above signed by the staff themselves or by the authorized representative of the Professional Staff (Form TECH-6 of Section 3).
- (g) A detailed description of the proposed methodology and staffing for training needs to be given, if the Data sheet specifies training as a specific component of the Assignment/job.

9.5 The Technical Proposal shall not include any financial information. A Technical Proposal containing financial information may be declared non responsive.

9.6 Financial Proposals: The Financial Proposal shall be prepared using the forms given in Section 4. It shall list all costs associated with the Assignment/job, including (a) remuneration for staff and (b) reimbursable expenses indicated in the Data sheet. If appropriate, these costs should be broken down by activity and, if appropriate, into foreign (if applicable) and domestic expenditures. The financial proposal shall not include any conditions attached to it and any such conditional financial proposal shall be rejected summarily.

10. Taxes

The Consultants shall fully familiarize themselves about the applicable to Domestic taxes (such as: value added or sales tax, service tax or income taxes, duties, fees, levies) on amounts payable by the Employer under the Contract. All such taxes must be included by the consultant in the financial proposal.

11. Currency

Consultants shall express the price of their Assignment/job in Indian Rupees.

12. Earnest Money Deposit (EMD)

12.1 Earnest Money Deposit

- An EMD of Rs.1,00,000/-(one lakh), in the form of bank guarantee (Format enclosed), which must be submitted along with the Proposal.
- Proposals not accompanied by EMD shall be rejected as non-responsive.
- No interest shall be payable by the Employer for the sum deposited as earnest money.
- The EMD of the unsuccessful bidders would be returned within one month of signing of the contract.

12.2 The EMD shall be forfeited by the Employer in the following events:

- If Proposal is withdrawn during the validity period or any extension agreed by the consultant thereof.
- If the Proposal is varied or modified in a manner not acceptable to the Employer after opening of Proposal during the validity period or any extension thereof.
- If the consultant tries to influence the evaluation process.
- If the First ranked consultant withdraws his proposal during negotiations (failure to arrive at consensus by both the parties shall not be construed as withdrawal of proposal by the consultant).
- Bid Processing Fees
- All consultants are required to pay Rs. 5000 towards Bid Processing Fees in the form of demand Draft drawn in favor of **Employer** (Ministry of Urban Development) and payable at New Delhi. The Bid Processing Fee is Non-Refundable.
- Please note that the Proposal, which does not include the bid processing fees, would be rejected as non-responsive.

13. Submission, Receipt, and Opening of Proposal

- 14.1 The original proposal, both technical and Financial Proposals shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed the proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of TECH-1 of Section 3, and FIN-1 of Section 4.
- 14.2 An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been dully authorized to sign. The signed Technical and Financial Proposals shall be marked" ORIGINAL".
- 14.3 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the name of the Assignment/job. The envelopes containing the Technical Proposals, Financial Proposals, and EMD shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address, file number (as given on LOI) be clearly marked "DO NOT OPEN, BEFORE **[insert the time and date of opening]**". The Employer shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may be case for Proposal rejection. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
- 14.4 The Proposals must be sent to the address/addresses indicated in the Data sheet and received by the Employer no later than the time and the date indicated in the Data sheet,

or any extension to this date in accordance with Para 4.2 above. Any proposal received by the Employer after the deadline for submission shall be returned unopened.

14. Proposal Evaluation

- 15.1 During the time between openings of Proposals to the award of Contract, the Consultants should not contact the Employer on any matter related to its Technical and/or Financial Proposal. Any effort by Consultants to influence the Employer in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Consultants' Proposal.
- 15.2 The employer has constituted a Consultant Selection Committee (CSC) which will carry out the entire evaluation process.
- 15.3 **Evaluation of Technical Proposals:** CSC while evaluating the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded and the competent authority accepts the recommendation.
- 15.4 The CSC shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and by applying the evaluation criteria, sub-criteria specified in the Data sheet. In the first stage of evaluation, a Proposal shall be rejected if it is found deficient as per the requirement indicated in the Data sheet for responsiveness of the proposal. Only responsive proposals shall be further taken up for evaluation. Evaluation of the technical proposal will start first and at this stage the financial bid (proposal) will remain unopened. The qualification of the consultant and the evaluation criteria for the technical proposal shall be as defined in the Data sheet.
- 15.5 **Public opening & evaluation of the Financial Proposals:** Financial proposals of only those firms who are technically qualified shall be opened publicly on [date & time], in the presence of the Consultants' representatives who choose to attend. The name of the Consultants, their technical score (if required) and their financial proposal shall be read aloud.
- 15.6 The CSC will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures, the former will prevail. In addition to the above corrections the items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, (i) if the Time-Based form of contract has been included in the RFP, the Evaluation Committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal to the corrected quantity and correct the total Proposal cost, (ii) if the Lump-Sum form of contract has been included in the RFP, no corrections are applied to the Financial Proposal in this respect. If permitted under RFP to quote in any currency other than Indian Rupees, prices shall be converted to Indian Rupees using the selling rates of exchange, source and reference date indicated in the Data sheet. Normally, the date will be the date of opening of the tender unless specified otherwise in the Data sheet.

- 15.7 After opening of financial proposals, appropriate selection method shall be applied to determine the consultant who will be declared winner and be eligible for award of the contract. The methods of selections are described in the Data Sheet.

15. Negotiations

- 16.1 Negotiations will be held at the date, time and address intimated to the qualified and selected bidder. The invited Consultant will, as a pre-requisite for attendance at the negotiations, confirm availability of all professional staff. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude a Contract.
- 16.2 Technical negotiations: Negotiations will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the Consultant to improve the Terms of Reference. The Employer and the Consultants will finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as “Description of Assignment/job”. Special attention will be paid to clearly defining the inputs and facilities required from the Employer to ensure satisfactory implementation of the Assignment/job. The Employer shall prepare minutes of negotiations which will be signed by the Employer and the Consultant.
- 16.3 Financial negotiations: After the technical negotiations are over, financial negotiations should be carried out in order to reflect any change in financials due to change in scope of work or due to clarification on any aspect of the technical proposal during the technical negotiations. Under no circumstance, the financial negotiation shall result in to increase in the price originally quoted by the consultant. Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff nor other proposed unit rates. For other methods, Consultants will provide the Employer with the information on remuneration rates described in the Appendix attached to Section 4 of this RFP.
- 16.4 Availability of Professional staff/experts: Having selected the Consultant on the basis of, among other things, an evaluation of proposed Professional staff, the Employer expects to negotiate a Contract on the basis of the Professional staff named in the Proposal. Before contract negotiations, the Employer will require assurances that the Professional staff will be actually available. The Employer will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity or if the professional staff has left the organization. If this is not the case and if it is established that Professional staff were offered in the proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate and be submitted by the Consultant within the period of time specified in the letter of invitation to negotiate.
- 16.5 Conclusion of the negotiations: Negotiations will conclude with a review of the draft Contract. To complete negotiations the Employer and the Consultant will initial the agreed Contract. If negotiations fail, the employer will reject all the proposals received and invite fresh proposals.

16. Award of Contract

- 17.1 After completing negotiations the Employer shall issue a Letter of Intent to the selected Consultant and promptly notify all other Consultants who have submitted proposals about the decision taken.
- 17.2 The consultants will sign the contract after fulfilling all the formalities/pre-conditions mentioned in the standard form of contract in Section-6, within 15 days of issuance of the letter of intent.
- 17.3 The Consultant is expected to commence the Assignment/job on the date and at the location specified in the Data Sheet.

17. Confidentiality

Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultants who submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its Proposal and may be subject to the provisions of the Employer's antifraud and corruption policy.

Instructions to Consultants

Part-II

DATA SHEET

S.No.	Paragraph Reference	Description	Details
1	2.1	Name of the Employer: Method of Selection:	Ministry of Urban Development (Govt. of India) Quality and Cost Based Selection (QCBS)
2	2.2	Name of the Assignment/job	Project Management Consultant (PMC)/SUTP.
3	2.3	Date & time and address for submission of proposal/ bid	Date Time 1500 Hrs. Address Under Secretary (MRTS) Ministry of Urban Development (Govt. of India) Nirman Bhavan, New Delhi-111001. Tel.91-11-2306 2594 Fax.91-11-2306 2594. E-mail: Sumit-d6@yahoo.com
4	2.5	Date and Time of Pre-proposal meeting	Pre-proposal meeting will be held on at Hrs. in the office of National Project Manager (GEF-SUTP) MoUD Room No. G-226, Nirman Bhawan New Delhi. Any clarifications required may be sent in writing so as to reach at least seven days prior to the date of pre-proposal meeting.
		The Employer's representative	Mr. Sumit Chatterjee -Under Secretary(MRTS), Ministry of Urban Development (Govt. of India) Room No. 322 C, Nirman Bhawan New Delhi-111001. Tel: 91-11-2306 2594 Fax: 91-11-2306 2594 E-mail: Sumit-d6@yahoo.com
5	2.6	Inputs and facilities provided by the Employer	The PMC will be part of the PMU set up and the data and other inputs as available or generated during the course of Project Implementation shall be made available to the PMC for execution of the work as per TOR enclosed as Section 5 of this document. Limited office accommodation shall be provided as part of PMU to facilitate day to day personal interaction between PMU and Consultants.
6	3.1 & 3.2	Eligibility of association of consultants	Refer S.No. 15 of Data Sheet

S.No.	Paragraph Reference	Description	Details
7	4.1	Address for requesting clarifications	Mr. Sumit Chatterjee Under Secretary (MRTS), Ministry of Urban Development (Govt. of India) Room No. 322, Nirman Bhawan New Delhi-111001. Tel: 91-11-2306 2594 Fax: 91-11-2306 2594 E-mail: Sumit-d6@yahoo.com <u>Note:</u> Further clarification if any may be requested in writing so as to reach not later than 7 days before the submission date.
8	8.0	Validity of Proposals	
9	9.3 (b)	The estimated number of professional staff-months required for the Assignment/job	As per TOR.
10	9.4	The formats of the Technical Proposal to be submitted	Form Tech 1: Letter of Proposal submission Form Tech 2 : Consultant's organization & experience Form Tech 3 : Comments & suggestions on TOR Form Tech 4 : Approach & methodology Form Tech 5 : Team composition Form Tech 6 : Curriculum vitae Form Tech 7 : Staffing Schedule Form Tech 8 : Work Schedule Form Tech 9: Comment / modification suggested on draft contract. Form Tech 10: Information regarding any conflicting activities and declaration thereof.
11	9.4 (g)	Training is a specific component of this Assignment/job	NO
12	9.6	Reimbursable Expenses	The Reimbursable expenses are: (1) Travel expenses (Flights/Train); (2) Miscellaneous Travel Expenses; (3) Subsistence allowance; (4) Local transportation costs; (5) Office rent/Accommodation/Clerical assistance
13	11.0	Consultant to state the cost in Indian Rupees:	Yes.
14	14.2	Consultant must submit the original and 6(six) number] copies of the Technical Proposal, and the original of the Financial Proposal.	

S.No.	Paragraph Reference	Description	Details
15	15.4	<p>Technical Evaluation Criteria: Criteria, sub-criteria and the point system, for evaluation of Technical Proposals shall be as under</p> <ul style="list-style-type: none"> i) Specific experience of the consultant firm relevant to the assignment /job : 20 marks ii) Adequacy of the proposed methodology and work plan in response to the terms of reference: 30 marks iii) Key professional staff: Qualification & competency for the assignment / job: 50 marks <p>Responsiveness to the Technical Proposal: Minimum Technical score required to consider responsiveness of the offer shall be—75 marks.</p>	
16	15.6	Consultants are requested to quote in Indian rupees only	
17	15.7	<p>Method of Selection / Criteria:</p> <p>The technical quality of the proposal will be given a weightage of 70% (percentage to be specified), the method of evaluation of technical qualification will follow the procedure given in para 15.4 above. The price bids of only those consultants who qualify technically will be opened. The proposal with the lowest cost may be given a financial score of 100 and the other proposal given financial score that are inversely proportionate to their prices. The financial proposal shall be allocated weight of 30% and the Technical Proposal 70%. For working out the combined score, the employer will use the following formula:</p> <p style="padding-left: 40px;">Total points = T (w) x T (s) + F (w) x LEC / EC, where</p> <p style="padding-left: 40px;">T (w) stands for weight of the technical score.</p> <p style="padding-left: 40px;">T (s) stands for technical score</p> <p style="padding-left: 40px;">F (w) stands for weight of the financial proposal</p> <p style="padding-left: 40px;">EC stands for Evaluated Cost of the financial proposal</p> <p style="padding-left: 40px;">LEC stands for Lowest Evaluated Cost of the financial proposal.</p> <p>The proposals will be ranked in terms of total points scored. The proposal with the highest total points (H-1) will be considered for award of contract and will be called for negotiations, if required.</p>	
18	17.3	<p>Expected date for commencement of consulting Assignment/job: [Insert date]</p> <p>Location for performance assignment / job: [New Delhi]</p>	

Section 3: Technical Proposal
FORM TECH-1
LETTER OF PROPOSAL SUBMISSION

[Location, Date]

To:

Mr. A.K. Jain (National Project Manager),
Project Management Unit (PMU)
Ministry of Urban Development (Govt. of India)
Nirman Bhawan, New Delhi-111001.

Dear Sirs:

We, the undersigned, offer to provide the consulting Assignment/job for SUTP Project Management in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope and requisite EMD.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Consultant], we hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification. If negotiations are held during the period of validity of the Proposal as indicated in Data Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations. We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

FORM TECH-2**CONSULTANT’S ORGANIZATION AND EXPERIENCE****A - Consultant’s Organization**

[Provide here a brief description of the background and organization of your firm/entity and each associate for this Assignment/job. The brief description should include ownership details, date and place of incorporation of the firm, objectives of the firm etc. Also if the consultant has formed a consortium, details of each of the member of the consortium, name of lead members etc shall be provided]

B - Consultant’s Experience

[Using the format below, provide information on each Assignment/job for which your firm, and each partner in the case of consortium or joint venture, was legally contracted either individually as a corporate entity or as one of the major partners within an association, for carrying out consulting Assignment/job similar to the ones requested under this Assignment/job.

S.No.	Description	Details
1	Firm’s Name	
2	Assignment/Job Name	
3	Description of Project	
4	Approx. value of the contract (in Rupees)	
5	Country / Location	
6	Duration of Assignment/Job in Months	
7	Name and Address of Employer	
8	Total No of staff-months of the Assignment/job	
9	Start Date (month/year)	
10	Completion Date (month/year)	
11	Name of associated Consultants, if any	
12	No of professional staff-months provided by associated Consultants	
13	Name of senior professional staff of your firm involved and functions performed	
14	Description of actual Assignment/job provided by your staff within the Assignment/job	

Note: Please provide documentary evidence from the client i.e copy of work order, contract for each of above mentioned assignment. The experience shall not be considered for evaluation if such requisite support documents are not provided with the proposal.

FORM TECH-3**COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE AND ON
COUNTERPART STAFF AND FACILITIES TO BE PROVIDED BY THE EMPLOYER**

A - On the Terms of Reference [Suggest and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the Assignment/job (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

B - On Inputs and Facilities to be provided by the employer [Comment here on Inputs and facilities to be provided by the Employer according to Paragraph 6 of the Part II Special information to consultants including: administrative support, office space, Domestic transportation, equipment, data, etc.]

FORM TECH-4**DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT/JOB**

[Technical approach, methodology and work plan are key components of the Technical Proposal. The Consultant is suggested to present his/her Technical Proposal divided into the following three chapters]

a) **Technical Approach and Methodology:** In this chapter Consultant should explain his understanding of the objectives of the Assignment/job, approach to the Assignment/job, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. The Consultant should highlight the problems being addressed and their importance, and explain the technical approach he/she would adopt to address them. The Consultant should also explain the methodologies he/she propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) **Work Plan:** The consultant should propose and justify the main activities of the Assignment/job, their content and duration, phasing and interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.

c) **Organization and Staffing:** The consultant should propose and justify the structure and composition of his/her team. He/She should list the main disciplines of the Assignment/job, the key expert responsible, and proposed technical and support staff.]

FORM TECH-5

TEAM COMPOSITION AND TASK ASSIGNMENT/JOBS

Professional Staff

Sr. No.	Name of Staff	Name of Firm	Area of Expertise	Position / Task assigned for this job

FORM TECH-6
CURRICULUM VITAE (CV) FOR PROPOSED
PROFESSIONAL STAFF

1. Proposed Position: [For each position of key professional separate form Tech-6 will be prepared]:

2. Name of Firm: [Insert name of firm proposing the staff]: _____

3. Name of Staff: [Insert full name]: _____

4. Date of Birth: _____

5. Nationality: _____

6. Education: [Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]: _____

7. Membership of Professional Associations: _____

8. Other Training: _____

9. Countries of Work Experience: [List countries where staff has worked in the last ten years]:

10. Languages: [For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]: _____

11. Employment Record: [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]:

- From [Year]: To Year]: _____
- Employer: _____
- Positions held: _____

12. Detailed Tasks Assigned: [List all tasks to be performed under this Assignment/job]

13. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned [Among the Assignment/jobs in which the staff has been involved, indicate the following information for those Assignment/jobs that best illustrate staff capability to handle the tasks listed under point 12.]

Name of Assignment/job or project: _____

Year: _____

Location: _____

Employer: _____

Main project features: _____

Positions held: _____

Activities performed: _____

14. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date:

Place:

Signature of staff member or authorized representative of the staff:

[Full name of authorized representative]:

FORM TECH-7
STAFFING SCHEDULE

S.No.	Name of Staff	Staff input (in the form of a bar chart)	Total Months

Note:

- 1 For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- 2 Months are counted from the start of the Assignment/job. For each staff indicate separately staff input for home and field work.

FORM TECH-8
WORK SCHEDULE

S.No.	Activity	Months	Total Months

- 1 Indicate all main activities of the Assignment/job, including delivery of reports (e.g.: inception, interim, draft and final reports), and other benchmarks such as Employer approvals. For phased Assignment/jobs indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

FORM TECH-9**COMMENTS / MODIFICATIONS SUGGESTED ON DRAFT CONTRACT**

[Here the consultant shall mention any suggestion / views on the draft contract attached with the RFP document. The consultant may also mention here any modifications sought by him in the provisions of the draft contract. This information shall be used at the time of the negotiations.

However, the Employer is not bound to accept any/all modifications sought and may reject any such request of modification.]

FORM TECH-10**INFORMATION REGARDING ANY CONFLICTING ACTIVITIES AND DECLARATION
THEREOF**

Are there any activities carried out by your firm or group company or any member of the consortium which are of conflicting nature as mentioned in Para 5 of section 2. If yes, please furnish details of any such activities.

If no, please certify, We hereby declare that our firm, our associate / group firm or any of the member of the consortium are not indulged in any such activities which can be termed as the conflicting activities under Para 5 of the section 2. We also acknowledge that in case of misrepresentation of the information, our proposals / contract shall be rejected / terminated by the Employer which shall be binding on us.

Authorized Signature [In full and initials]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

SECTION 4: FINANCIAL PROPOSAL**FORM FIN-1****FINANCIAL PROPOSAL SUBMISSION FORM****[Location, Date]**

To

Director (Urban Transport),
 Ministry of Urban Development (Govt. of India)
 Nirman Bhawan, New Delhi-111001.

Dear Sirs:

We, the undersigned, offer to provide the consulting Assignment/job for SUTP Project Management in accordance with your Request for Proposal dated **[Insert Date]** and our Technical Proposal. Our attached Financial Proposal is for the sum of **[Insert amount(s) in words and figures]**. This amount is inclusive of the Domestic taxes. We hereby confirm that the financial proposal is unconditional and we acknowledge that any condition attached to financial proposal shall result in rejection of our financial proposal.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in the Data Sheet. Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below:

Name and Address

Amount and Purpose of Commission Gratuity of Agents

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

FORM FIN-2

SUMMARY OF COSTS

S.No.	Particulars	Amount in Rupees	Amount in words
1	Remuneration		
2	Reimbursable		
3	Miscellaneous expenses		
4	Service Tax / Any other tax		
5	Total		

Authorized Signature: _____

Name: _____

Designation: _____

Name of firm: _____

Address: _____

FORM FIN-3

BREAKDOWN OF REMUNERATION

(for details please refer to Note below)

S.No.	Name of Staff	Position	Man Month Rates (A)	Proposed Man Months (B)	Total Amount in Rupees. (A)*(B)
1	Key professionals ¹				
2.	Support Staff ²				

1 Key Professionals are to be indicated by name

2 Support Staff is to be indicated per category (e.g.: Draftsman, Assistant etc.)

Total Remuneration = _____ Amount in Rupees

(Amount in Words):

Note:

- Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, Assistants etc.). Cost of Secretarial services, if any, will be indicated in form Fin-5.
- Positions of Professional Staff shall coincide with the ones indicated in Form TECH-5 & 7.
- Indicate staff-month rate for each activity separately.

FORM FIN-4**BREAKDOWN OF REIMBURSABLE EXPENSES**

(Note: Reimbursable expenses will be quoted only for work related travel outside the place of work decided by the employer in the data sheet. It can also include travel from the Headquarter of the consultant to the place of work).

Activity No: _____ Name: _____

SI. No	Description	Unit	Quantity	Unit Price In	Total Amount
1	Travel expense flights/Train	Trip			
2	Miscellaneous travel expenses				
3	Subsistence allowance	Day			
4	Local transportation costs				

Total Reimbursable: = _____ (Total amount in Rupees).

Amount in words:

FORM FIN – 5**Miscellaneous Expenses**

(It will include only such expenses which are directly chargeable to the assignment/job)

S.No	Particulars	Unit Rate	Quantity(staff months) / number	Amount
1	Secretarial staff			
2	Office equipment			
3	Preparation of reports /deliverables.			
	TOTAL			

SECTION 5: TERMS OF REFERENCE FOR PROJECT CONSULTANT

To be Inserted

SECTION 6: STANDARD FORM OF CONTRACT

Contract for Consultants' Services

Time Based

Between

[Name of the Employer]

And

[Name of the Consultant]

Dated: _____

I. FORM OF CONTRACT

(Text in brackets [] should be filled up appropriately; all notes should be deleted in final text) This CONTRACT (hereinafter called the “Contract”) is made the [day] day of the month of [month], [year], between the President of India acting through (designation), Ministry of ----, Department of -- ----, Government of India, (office address), [name of employer] (hereinafter called the “Employer”), of the First Part and, [name of Consultant] (hereinafter called the “Consultant”) of the Second Part. [Note: If the Consultant consist of more than one entity, the above should be partially amended to read as follows: “...(hereinafter called the “Employer”) and, on the other hand, a joint venture/consortium/association consisting of the following entities, namely, lead consultant [name of lead Consultant] and [name of Consultant/s] (hereinafter called the “Consultant”).

WHEREAS

(a) The Consultant, having represented to the “Employer” that he has the required professional skills, personnel and technical resources, has offered to provide in response to the Tender Notice dated_____ issued by the Employer ;

(b) The “Employer” has accepted the offer of the Consultant to provide the services on the terms and conditions set forth in this Contract.

NOW, THEREFORE, IT IS HEREBY AGREED between the parties as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:

(a) The General Conditions of Contract;

(b) The Special Conditions of Contract;

(c) The following Appendices:

- Appendix A: Description of Services
- Appendix B: Reporting Requirements
- Appendix C: Staffing schedule
- Appendix D: Cost Estimates
- Appendix E: Duties of the “Employer”
- Appendix F: Duties of the Consultant

2. The mutual rights and obligations of the “Employer” and the Consultant shall be as set forth in the Contract, in particular:

(a) The Consultants shall carry out and complete the Services in accordance with the provisions of the Contract; and

(b) The “Employer” shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

Signed by -----

In presence of 1. For and on behalf of the President of India[name of “Employer”]

(Witnesses)

- (i) [Authorized Representative]
- (ii) For and on behalf of [name of Consultant]

In presence of

(Witnesses)

- (i)
- (ii) [Authorized Representative]

[Note: If the Consultant consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:]

- (iii) For and on behalf of each of the Members of the Consultant.

[Name of member]

[Authorized Representative]

- (iv) [Name of member]
- [Authorized Representative]

II. GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions: Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) “Applicable Law” means the laws and any other instruments having the force of law in India for the time being.
- (b) “Consultant” means any private or public entity that will provide the Services to the “Employer” under the Contract.
- (c) “Contract” means the Contract signed by the Parties and all the attached documents listed in its Clause 1 that is this General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (d) “Day” means calendar day.
- (e) “Effective Date” means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (f) “Foreign Currency” means any currency other than the currency of the “Employer’s” country.
- (g) “GC” means these General Conditions of Contract.
- (h) “Government” means the Government of India
- (i) “Local Currency” means Indian Rupees.
- (j) “Member” means any of the entities that make up the joint venture/consortium/ association; and “Members” means all these entities.
- (k) “Party” means the “Employer” or the Consultant, as the case may be, and “Parties” means both of them.
- (l) “Personnel” means professionals and support staff provided by the Consultants or by any Sub-Consultants and assigned to perform the Services or any part thereof; “Foreign Personnel” means such professionals and support staff who at the time of being so provided had their domicile outside the Government’s country; “Local Personnel” means such professionals and support staff who at the time of being so provided had their domicile inside the Government’s country; and “Key Personnel” means the Personnel referred to in Clause GC 4.2(a).
- (m) “Reimbursable expenses” means all assignment-related costs [such as travel, translation, report printing, secretarial expenses, subject to specified maximum limits in the Contract].
- (n) “SC” means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (o) “Services” means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.

- (p) “Sub-Consultants” means any person or entity to whom/which the Consultant subcontracts any part of the Services.
- (q) “Third Party” means any person or entity other than the “Employer”, or the Consultant.
- (r) “In writing” means communicated in written form with proof of receipt.

1.2 Relationship between the Parties: Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the “Employer” and the Consultant. The Consultant, subject to this Contract, has complete charge of Personnel and Sub-Consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.3 Law Governing Contract: This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the applicable laws of India.

1.4 Headings: The headings shall not limit, alter or affect the meaning of this Contract.

1.5 Notices

1.5.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered post to such Party at the address specified in the SC.

1.5.2 A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

1.6 Location: The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, as the “Employer” may approve.

1.7 Authority of Lead Partner: In case the Consultant consists of a joint venture/consortium/association of more than one entity, the Members hereby authorize the entity specified (Lead Consultant) in the SC to act on their behalf in exercising all the Consultant’s rights and obligations towards the “Employer” under this Contract, including without limitation the receiving of instructions and payments from the “Employer”. However, each member or constituent of Consortium of Consultant shall be jointly and severally liable for all obligations of the Consultant under the Contract.

1.8 Authorized Representatives: Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the “Employer” or the Consultant may be taken or executed by the officials specified in the SC.

1.9 Taxes and Duties: The Consultant, Sub-Consultants and Personnel shall be liable to pay such direct and indirect taxes, duties, fees and other impositions levied under the applicable laws of India.

1.10 Fraud and Corruption

1.10.1 Definitions: It is the Employer’s policy to require that Employers as well as Consultants observe the highest standard of ethics during the execution of the Contract. In pursuance

of this policy, the Employer defines, for the purpose of this provision, the terms set forth below as follows:

- (i) “Corrupt practice” means the offering, receiving, or soliciting, directly or indirectly, of any thing of value to influence the action of a public official in the selection process or in contract execution;
- (ii) “Fraudulent practice” means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
- (iii) “Collusive practices” means a scheme or arrangement between two or more consultants, with or without the knowledge of the Employer, designed to establish prices at artificial, noncompetitive levels;
- (iv) “coercive practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract;

1.10.2 Measures to be taken by the Employer

- (a) The Employer may terminate the contract if it determines at any time that representatives of the consultant were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of that contract, without the consultant having taken timely and appropriate action satisfactory to the Employer to remedy the situation;
- (b) The Employer may also sanction against the Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the Consultant has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Employer-financed contract;

1.10.3 Commissions and Fees

At the time of execution of this Contract, the Consultants shall disclose any commissions or fees that may have been paid or are agreed to be paid to agents, representatives, or commission agents with respect to the selection process or execution of the contract. The information disclosed must include at least the name and address of the agent, representative, or commission agent, the amount and currency, and the purpose of the commission or fee.

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract. This Contract shall come into force and effect on the date (the “Effective Date”) of the Employer’s notice to the Consultant instructing the Consultant to begin carrying out the Services. This notice shall confirm that the conditions precedent and effectiveness conditions, if any, listed in the SC have been met.

2.2 Termination of Contract for Failure to Become Effective: If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as specified in the SC, either Party may, by not less than twenty one (21) days written notice to the other Party, declare this Contract to be null and void, and in the event

of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

- 2.3 Commencement of Services:** The Consultant shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.
- 2.4 Expiration of Contract:** Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.
- 2.5 Entire Agreement:** This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any other statement, representation, promise or agreement not set forth herein.
- 2.6 Modifications or Variations:** (a) Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. Pursuant to Clause GC 7.2 here of, however, each Party shall give due consideration to any proposals for modification or variation made by the other Party. (b) In cases of substantial modifications or variations, the prior written consent of the Employer is required.
- 2.7 Force Majeure**
- 2.7.1 Definition (a)** For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable and not brought about by or at the instance of the Party claiming to be affected by such events and which has caused the non-performance or delay in performance, and which makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other extreme adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies. **(b)** Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or by or of such Party’s Sub-Consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected both to take into account at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations hereunder. **(c)** Subject to clause 2.7.2, Force Majeure shall not include insufficiency of funds or inability to make any payment required hereunder.
- 2.7.2 No Breach of Contract:** The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.7.3 **Measures to be taken:**

- (a) A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.
- (c) Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
- (d) During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant, upon instructions by the “Employer”, shall either: (i) demobilize or (ii) continue with the Services to the extent possible, in which case the Consultant shall continue to be paid proportionately and on prorate basis, under the terms of this Contract.
- (e) In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled according to Clause GC 8.

2.8 *Suspension:* The “Employer” may, by written notice of suspension to the Consultant, suspend all payments to the Consultant hereunder if the Consultant fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall allow the Consultant to remedy such failure, if capable of being remedied, within a period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

2.9 **Termination**

2.9.1.1 *By the “Employer”:* The “Employer” may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (h) of this Clause GC 2.9.1.1.

- (a) If the Consultant fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the “Employer” may have subsequently approved in writing.
- (b) If the Consultant becomes (or, if the Consultant consists of more than one entity, if any of its Members becomes and which has substantial bearing on providing Services under this contract) insolvent or go into liquidation or receivership whether compulsory or voluntary.
- (c) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.
- (d) If the Consultant, in the judgment of the “Employer”, has engaged in corrupt or fraudulent practices in competing for or in executing this Contract.

- (e) If the Consultant submits to the “Employer” a false statement which has a material effect on the rights, obligations or interests of the “Employer”.
- (f) If the Consultant places itself in position of conflict of interest or fails to disclose promptly any conflict of interest to the Employer.
- (g) If the consultant fails to provide the quality services as envisaged under this Contract. The Consultancy Monitoring Committee (CMC) formulated to monitor the progress of the assignment may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. The CMC may decide to give one chance to the consultant to improve the quality of the services.
- (h) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (i) If the “Employer”, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

2.9.1.2 In such an occurrence the “Employer” shall give a not less than thirty (30) days’ written notice of termination to the Consultants, and sixty (60) days’ in case of the event referred to in (h).

2.9.2 *By the Consultant:* The Consultant may terminate this Contract, by not less than thirty (30) days’ written notice to the “Employer”, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause GC 2.9.2.

- (a) If the “Employer” fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause GC 8 hereof within forty-five (45) days after receiving written notice from the Consultant that such payment is overdue.
- (b) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (c) If the “Employer” fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.
- (d) If the “Employer” is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the “Employer” of the Consultant’s notice specifying such breach.

2.9.3 *Cessation of Rights and Obligations:* Upon termination of this Contract pursuant to Clauses GC 2.2 or GC 2.9 hereof, or upon expiration of this Contract pursuant to Clause GC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GC 3.3 hereof, (iii) the Consultant’s obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GC 3.6 hereof, and (iv) any right which a Party may have under the Law.

2.9.4 *Cessation of Services:* Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a

close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the “Employer”, the Consultant shall proceed as provided, respectively, by Clauses GC 3.9 or GC 3.10 hereof.

2.9.5 Payment upon Termination: Upon termination of this Contract pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the “Employer” shall make the following payments to the Consultant:

- (a) If the Contract is terminated pursuant to Clause 2.9.1 (g), (h) or 2.9.2, remuneration pursuant to Clause GC 6.3(h) (i) hereof for Services satisfactorily performed prior to the effective date of termination, and reimbursable expenditures pursuant to Clause GC 6.3(h)(ii) hereof for expenditures actually and reasonably incurred prior to the effective date of termination.
- (b) If the agreement is terminated pursuant of Clause 2.9.1 (a) to (f), the consultant shall not be entitled to receive any agreed payments upon termination of the contract. However, the “Employer” may consider making payment for the part satisfactorily performed on the basis of Quantum Meruit as assessed by it, if such part is of economic utility to the Employer. Applicable Under such circumstances, upon termination, the client may also impose liquidated damages as per the provisions of Clause 9 of this agreement. The consultant will be required to pay any such liquidated damages to client within 30 days of termination date.

2.9.6 Disputes about Events of Termination: If either Party disputes whether an event specified in paragraphs (a) through (g) of Clause GC 2.9.1 or in Clause GC 2.9.2 hereof has occurred, such Party may, within forty-five (30) days after receipt of notice of termination from the other Party, refer the matter to Clause GC 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3. OBLIGATIONS OF THE CONSULTANT

3.1 General

3.1.1 Standard of Performance: The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods.

The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the “Employer”, and shall at all times support and safeguard the “Employer’s legitimate interests in any dealings with Sub-Consultants or Third Parties.

3.2 Conflict of Interests: The Consultant shall hold the “Employer’s interests paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments or their own corporate interests. If during the period of this contract, a conflict of interest arises for any reasons, the Consultant shall promptly disclose the same to the Employer and seek its instructions.

- 3.2.1 *Consultant not to benefit from Commissions, Discounts, etc.:*** (a) The payment of the Consultant pursuant to Clause GC 6 hereof shall constitute the Consultant's only payment in connection with this Contract and, subject to Clause GC 3.2.2 hereof, the Consultant shall not accept for its own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or in the discharge of its obligations hereunder, and the Consultant shall use its best efforts to ensure that any Sub-Consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional payment. (b) Furthermore, if the Consultant, as part of the Services, has the responsibility of advising the "Employer" on the procurement of goods, works or services, the Consultant shall comply with the Employer's applicable procurement guidelines, and shall at all times exercise such responsibility in the best interest of the "Employer". Any discounts or commissions obtained by the Consultant in the exercise of such procurement responsibility shall be for the account of the "Employer".
- 3.2.2 *Consultant and Affiliates Not to Engage in Certain Activities:*** The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub-Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.
- 3.2.3 *Prohibition of Conflicting Activities:*** The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities that would conflict with the activities assigned to them under this Contract.
- 3.3 *Confidentiality:*** Except with the prior written consent of the "Employer", the Consultant and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and its Personnel make public the recommendations formulated in the course of, or as a result of, the Services.
- 3.4 *Insurance to be Taken out by the Consultant:*** The Consultant (i) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain insurance, at their (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the "Employer", insurance against the risks, and for the coverage specified in the SC, and (ii) at the "Employer's request, shall provide evidence to the "Employer" showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.
- 3.5 *Accounting, Inspection and Auditing:*** The Consultant (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and (ii) shall periodically permit the "Employer" or its designated representative and/or the Employer, and up to five years from expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the "Employer" or the Employer, if so required by the "Employer" or the Employer as the case may be.

- 3.6 *Consultant's Actions Requiring Employer's Prior Approval:*** The Consultant shall obtain the "Employer's prior approval in writing before taking any of the following actions:
- (a) Any change or addition to the Personnel listed in Appendix C.
 - (b) Subcontracts: the Consultant may subcontract work relating to the Services to an extent and with such experts and entities as may be approved in advance by the "Employer". Notwithstanding such approval, the Consultant shall always retain full responsibility for the Services. In the event that any Sub-Consultants are found by the "Employer" to be incompetent or incapable or undesirable in discharging assigned duties, the "Employer" may request the Consultant to provide a replacement, with qualifications and experience acceptable to the "Employer", or to resume the performance of the Services itself.
- 3.7 *Reporting Obligations:*** The Consultant shall submit to the "Employer" the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix. Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.
- 3.8 *Documents Prepared by the Consultant to be the Property of the "Employer":*** All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultant for the "Employer" under this Contract shall become and remain the property of the "Employer", and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the "Employer", together with a detailed inventory thereof. The Consultant may retain a copy of such documents, but shall not use anywhere, without taking permission, in writing, from the Employer and the Employer reserves right to grant or deny any such request.. If license agreements are necessary or appropriate between the Consultant and third parties for purposes of development of any such computer programs, the Consultant shall obtain the "Employer's prior written approval to such agreements, and the "Employer" shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned.
- 3.9 *Equipment, Vehicles and Materials Furnished by the "Employer":*** - Deleted

4. CONSULTANTS' PERSONNEL AND SUB-CONSULTANTS

4.1 General:

The Consultant shall employ and provide such qualified and experienced Personnel and Sub-Consultants as are required to carry out the Services.

4.2 Description of Personnel:

- (a) The title, agreed job description, minimum qualification and estimated period of engagement in the carrying out of the Services of each of the Consultant's Key Personnel are as per the consultant's proposal and are described in Appendix C. If any of the Key Personnel has already been approved by the "Employer", his/her name is listed as well.

- (b) If required to comply with the provisions of Clause GC 3.1.1 hereof, adjustments with respect to the estimated periods of engagement of Key Personnel set forth in Appendix C may be made by the Consultant by written notice to the “Employer”, provided (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1(b) of this Contract. Any other such adjustments shall only be made with the “Employer’s written approval.
- (c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the “Employer” and the Consultant. In case where payments under this Contract exceed the ceilings set forth in Clause GC 6.1(b) of this Contract, this will be explicitly mentioned in the agreement.

4.3 Approval of Personnel:

The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the “Employer”. In respect of other Personnel which the Consultant proposes to use in the carrying out of the Services, the Consultant shall submit to the “Employer” for review and approval a copy of their Curricula Vitae (CVs). If the “Employer” does not object in writing (stating the reasons for the objection) within twenty-one (21) days from the date of receipt of such CVs, such Personnel shall be deemed to have been approved by the “Employer”.

4.4 Removal and/or Replacement of Personnel:

- (a) Except as the “Employer” may otherwise agree, no changes shall be made in the Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Personnel, the Consultant shall forthwith provide as a replacement a person of equivalent or better qualifications.
- (b) If the “Employer” (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the “Employer’s written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the “Employer”.
- (c) Any of the Personnel provided as a replacement under Clauses (a) and (b) above, as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the “Employer”. The rate of remuneration applicable to a replacement person will be the rate of remuneration paid to the replacement person. Also (i) the Consultant shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (ii) the remuneration to be paid for any of the Personnel

provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

4.5 Resident Project Manager:

If required by the SC, the Consultant shall ensure that at all times during the Consultant's performance of the Services a resident project manager, acceptable to the "Employer", shall take charge of the performance of such Services.

5. OBLIGATIONS OF THE "EMPLOYER"

5.1 Assistance and Exemptions: Unless otherwise specified in the SC, the "Employer" shall use its best efforts to ensure that the Government shall:

- (a) Provide the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
- (b) Arrange for the Foreign Personnel to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in India.
- (c) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.
- (d) Provide to the Consultant, Sub-Consultants and Personnel any such other assistance as may be specified in the SC.

5.2 Change in the Applicable Law Related to Taxes and Duties: If, after the date of this Contract, there is any change in the Applicable Laws of India with respect to taxes and duties, which are directly payable by the consultant for providing the services i.e. service tax or any such applicable tax from time to time, which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause GC 6.1(b).

5.3 Services, Facilities and Property of the "Employer":

- (a) The "Employer" shall make available to the Consultant and its Personnel, for the purposes of the Services and free of any charge, the services, facilities and property described in Appendix E at the times and in the manner specified in said Appendix E.
- (b) In case that such services, facilities and property shall not be made available to the Consultant as and when specified in Appendix E, the Parties shall agree on any time extension that it may be appropriate to grant to the Consultant for the performance of the Services.

5.4 Payment: In consideration of the Services performed by the Consultant under this Contract, the “Employer” shall make to the Consultant such payments and in such manner as is provided by Clause GC 6 of this Contract.

5.5 **Counterpart Personnel:** (a) If necessary, the “Employer” shall make available to the Consultant free of charge such professional and support counterpart personnel, to be nominated by the “Employer” with the Consultant’s advice, if specified in Appendix E. (b) Professional and support counterpart personnel, excluding “Employer’s liaison personnel, shall work under the exclusive direction of the Consultant. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultant that is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the “Employer” shall not unreasonably refuse to act upon such request.

6. PAYMENTS TO THE CONSULTANT

6.1 Total Cost of the Services:

- (a) The total cost of the Services payable is set forth in Appendix D as per the consultant’s proposal to the Employer and as negotiated thereafter.
- (b) Except as may be otherwise agreed under Clause GC 2.6 and subject to Clause GC 6.1(c), payments under this Contract shall not exceed the amount specified in Appendix-D.
- (c) Notwithstanding Clause GC 6.1(b) hereof, if pursuant to any of the Clauses GC 4.2 (c) or 5.2 hereof, the Parties shall agree that additional payments shall be made to the Consultant in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GC 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GC 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.
- (d) For the purpose of determining the payment due for modification or variation as provided in clause 2.6, break down of the lump-sum price is provided in appendix D

6.2 **Currency of Payment:** All payments shall be made in Indian Rupees.

6.3 **Terms of Payment:** The payments in respect of the Services shall be made as follows:

- (a) The consultant shall submit the invoice for payment when the payment is due as per the agreed terms. The payment shall be released as per the work related milestones achieved and as per the specified percentage as per SC 13.
- (b) Once a milestone is completed, the consultant shall submit the requisite deliverables as specified in this Contract. The Employer shall release the requisite payment upon acceptance of the deliverables. However, if the Employer fails to intimate acceptance of the deliverables or its objections thereto, within 30 days of receipt of it, the Employer shall release the payment to the consultant without further delay.

- (c) Final Payment : The final payment as specified in SC 13 shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultant and approved as satisfactory by the “Employer”. The Services shall be deemed completed and finally accepted by the “Employer” and the final report and final statement shall be deemed approved by the “Employer” as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the “Employer” unless the “Employer”, within such ninety (90) day period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the final report or final statement. The Consultant shall thereupon promptly make any necessary corrections, and thereafter the foregoing process shall be repeated. Any amount, which the “Employer” has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract, shall be reimbursed by the Consultant to the “Employer” within thirty (30) days after receipt by the Consultant of notice thereof. Any such claim by the “Employer” for reimbursement must be made within twelve (12) calendar months after receipt by the “Employer” of a final report and a final statement approved by the “Employer” in accordance with the above.
- (d) For the purpose of payment under Clause 6.3 (b) above, acceptance means; acceptance of the deliverables by the Employer after submission by the consultant and the consultant has made presentation to the CMC / Employer with modifications to be communicated in writing by the Employer to the consultant.
- (e) If the deliverables submitted by the consultant are not acceptable to the Employer / CMC, reasons for such non-acceptance should be recorded in writing; the Employer shall not release the payment due to the consultant. This is without prejudicing the Employer’s right to levy any liquidated damages under clause 9. In such case, the payment will be released to the consultant only after it re-submits the deliverable and which is accepted by the Employer.
- (f) All payments under this Contract shall be made to the accounts of the Consultant specified in the SC.
- (g) With the exception of the final payment under (c) above, payments do not constitute acceptance of the Services nor relieve the Consultant of any obligations hereunder, unless the acceptance has been communicated by the Employer to the consultant in writing and the consultant has made necessary changes as per the comments / suggestions of the Employer communicated to the Consultant.
- (h) In case of early termination of the contract, the payment shall be made to the consultant as mentioned here with:
- (i) Assessment should be made about work done from the previous milestone, for which the payment is made or to be made till the date of the termination. The consultant shall provide the details of persons reasonably worked during this period with supporting documents. Based on such details, the remuneration shall be calculated based on the man month rate as specified.

- (ii) A reasonable assessment of the reimbursable and miscellaneous expenses shall be made based on details furnished by the consultant in this regard with supporting documents and based on the assessment of the work done and the respective rates as provided. Wherever such an assessment is difficult, the rates should be arrived at by calculating the amount on pro-rata basis. The total amount payable shall be the amount calculated as per (i) and (ii) above plus any applicable tax.

7. FAIRNESS AND GOOD FAITH

- 7.1 **Good Faith:** The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.
- 7.2 **Operation of the Contract:** The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause GC 8 hereof.

8. SETTLEMENT OF DISPUTES

- 8.1 **Amicable Settlement:** Performance of the contract is governed by the terms & conditions of the contract. In case of dispute arises between the parties regarding any matter under the contract, either Party of the contract may send a written Notice of Dispute to the other party. The Party receiving the Notice of Dispute will consider the Notice and respond to it in writing within 30 days after receipt. If that party fails to respond within 30 days, or the dispute cannot be amicably settled within 60 days following the response of that party, clause GC 8.2 shall become applicable.
- 8.2 **Arbitration:** In the case of dispute arising upon or in relation to or in connection with the contract between the Employer and the Consultant, which has not been settled amicably, any party can refer the dispute for Arbitration under (Indian) Arbitration and Conciliation Act, 1996. Such disputes shall be referred to an Arbitral Tribunal consisting of 3 (three) arbitrators, one each to be appointed by the Employer and the Consultant, the third arbitrator shall be chosen by the two arbitrators so appointed by the parties and shall act as Presiding Arbitrator. In case of failure of the two arbitrators, appointed by the parties to reach a consensus regarding the appointment of the third arbitrator within a period of 30 days from the date of appointment of the two arbitrators, the Presiding arbitrator shall be appointed by the Secretary of the Ministry / Department. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings.
- 8.3. Arbitration proceedings shall be held in India at the place indicated in SC and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.

8.4 The decision of the majority of arbitrators shall be final and binding upon both parties. The expenses of the arbitrators as determined by the arbitrators shall be shared equally by the Employer and the Consultant. However, the expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. All arbitration awards shall be in writing and shall state the reasons for the award.

9. LIQUIDATED DAMAGES

9.1 The parties hereby agree that due to negligence of act of any party, if the other party suffers losses, damages the quantification of which may be difficult, and hence the amount specified hereunder shall be construed as reasonable estimate of the damages and both the parties agree to pay such liquidated damages, as defined hereunder as per the provisions of this Contract.

9.2 The amount of liquidated damages under this Contract shall not exceed [10] % of the total value of the contract as specified in Appendix D.

9.3 The liquidated damages shall be applicable under following circumstances:

- (a) If the deliverables are not submitted as per schedule as specified in SC 13, the Consultant shall be liable to pay 1% of the total cost of the services for delay of each week or part thereof.
- (b) If the deliverables are not acceptable to the Employer as mentioned in Clause 6.3 (f), and defects are not rectified to the satisfaction of the Employer within 30 days of the receipt of the notice, the Consultant shall be liable for Liquidated Damages for an amount equal to [1] % of total cost of the services for every week or part thereof for the delay.

10. MISCELLANEOUS PROVISIONS:

- (i) “Nothing contained in this Contract shall be construed as establishing or creating between the Parties, a relationship of master and servant or principal and agent.
- (ii) Any failure or delay on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.
- (iii) The Contractor/Consultant shall notify the Employer/ the Government of India of any material change in their status, in particular, where such change would impact on performance of obligations under this Contract.
- (iv) Each member/constituent of the Contractor/Consultant, in case of a consortium, shall be jointly and severally liable to and responsible for all obligations towards the Employer/Government for performance of works/services including that of its Associates/Sub Contractors under the Contract.
- (v) The Contractor/Consultant shall at all times indemnify and keep indemnified the Employer/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under the Project.
- (vi) The Contractor/Consultant shall at all times indemnify and keep indemnified the Employer/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by

its (the Contractor's/Consultant's) employees or agents or by any other third Party resulting from or by any action, omission or operation conducted by or on behalf of the Contractor/Consultant.

- (vii) The Contractor/ Consultant shall at all times indemnify and keep indemnified the Employer/Government of India against any and all claims by Employees, Workman, Contractors, sub-contractors, suppliers, agent(s), employed engaged or otherwise working for the Contractor, in respect of wages, salaries, remuneration, compensation or the like. (viii) All claims regarding indemnity shall survive the termination or expiry of the Contract.
- (ix) It is acknowledged and agreed by all Parties that there is no representation of any type, implied or otherwise, of any absorption, regularization, continued engagement or concession or preference for employment of persons engaged by the (Contractor/Consultant) for any engagement, service or employment in any capacity in any office or establishment of the Government of India or the Employer.

III. SPECIAL CONDITIONS OF CONTRACT

(Clauses in brackets { } are optional; all notes should be deleted in final text)

SC Clause	Ref. of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
1	1.5	<p>The addresses are:</p> <p>1. Employer/Representative :</p> <p>Mr. A.K. Jain(National Project Manager), Project Management Unit(PMU), Ministry of Urban Development (Govt. of India) Nirman Bhawan, New Delhi-111001. Tel. 91-11-23063498 Fax: 91-11-23063499</p> <p>2. Consultant :</p> <p>Attention : Fax:</p>
2	1.7	<p>Lead Partner is [insert name of member]</p> <p>Note: If the Consultant consists of a joint venture/ consortium/ association of more than one entity, the name of the entity whose address is specified in Clause SC 1.5 should be inserted here. If the Consultant consists only of one entity, this Clause SC 1.7 should be deleted from the SC.</p>
3	1.8	<p>The Authorized Representatives are:</p> <p>For the “Employer”:</p> <p>Mr. A.K. Jain (National Project Manager), Project Management Unit(PMU) Ministry of Urban Development(Govt. of India)</p> <p>For the Consultant:</p>
4	2.1	<p>The effective date of the contract shall be the date on which both parties sign the contract.</p>
5	2.2	<p>The Time period shall be : [insert time period, e.g.:2 months]</p>
6	2.3	<p>The Time period shall be : [insert time period, e.g.:30 days]</p>
7	2.4	<p>The Time period shall be : [insert time period, e.g.: 48 months]</p>
8	3.4	<p>Limitation of the Consultants’ Liability towards the “Employer”</p> <p>{Note: Proposals to introduce exclusions/limitations of the Consultants’ liability under the Contract should be carefully scrutinized by Employers/”Employer’s. In this regard the parties should be aware of the Employer’s policy on this matter which is as follows:</p> <p>1. If the Parties agree that the Consultants’ liability should</p>

SC Clause	Ref. of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
		<p>simply be governed by the Applicable Laws of India, they should delete this Clause SC 3.4 from the SC.</p> <p>2. If the Parties wish to limit or to partially exclude the Consultants' liability to the "Employer", they should note that, to be acceptable to the Employer, any limitation of the Consultants' liability should at the very least be reasonably related to (a) the damage the Consultants might potentially cause to the "Employer", and (b) the Consultants' ability to pay compensation using their own assets and reasonably obtainable insurance coverage. The Consultants' liability should not be limited to less than a multiplier of the total payments to the Consultants under the Contract for remuneration and reimbursable expenses. A statement to the effect that the Consultants are liable only for the re-performance of faulty Services is not acceptable to the Employer. Also, the Consultants' liability should never be limited for loss or damage caused by the Consultants' gross negligence or willful misconduct.</p>
9	3.4	<p>The risks and the insurance coverage shall be as follows: (Note : Delete/modify whichever is not applicable)</p> <p>(a) Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Government's country by the Consultant or its Personnel or any Sub-Consultants or their Personnel, with a minimum coverage of as per Motor Vehicles Act 1988.</p> <p>(b) Third Party liability insurance, with a minimum coverage of [insert amount and currency];</p> <p>(c) Professional liability insurance to cover the employer against any loss suffered by the employer due to the professional service provided by the Consultant, with a minimum coverage of equal to the total contract value for the consultancy.</p> <p>(d) Workers' compensation insurance in respect of the Personnel of the Consultant and of any Sub-Consultants, in accordance with the relevant provisions of the Applicable Laws of India, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and</p> <p>(e) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents</p>

SC Clause	Ref. of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
		prepared by the Consultant in the performance of the Services, by theft, fire or any natural calamity.
10	4.5	The Team Leader shall be the Resident Project Manager and shall be available to the PMU for carrying out day-to-day work/assignments as prescribed by the PMU.
11	5.1(a),(b),(c). 5.1(d)	Deleted. Limited office accommodation shall be provided as part of the PMU to facilitate day to day personal interaction between PMU and Consultants.
12	6.1 (b)	The ceiling in local currency is: [insert amount and currency]
13	6.3 & 9.3	<p>I. Any advance payment (as decided in the negotiated contract agreement) shall be made on commencement of the service secured by a B.G. of equal amount. This advance payment shall be offset in subsequent three quarterly instalments.</p> <p>II. Balance payments shall be made quarterly (3 monthly) in 16 equal instalments on submission of invoice by the consultant at the end of the quarter supported by :</p> <ul style="list-style-type: none"> i. Time sheet indicating the man-month input of the key professionals / support staff, with respect to Form Fin -3. ii. Details of Reimbursable Expenses on the basis of actual and on submission of relevant documents/ receipts (as mentioned in Fin-4). iii. Claim of miscellaneous Expenses (Fin 5) on proportionate basis. <p>and certification by PMU of services being satisfactory.</p> <p>III. 5% amount shall be deducted from each instalment and will be retained by the employers. This amount shall be paid along with the last instalment</p>
14	8.3	The Arbitration proceedings shall take place in (New Delhi) in India.

Binding signature of Employer Signed by _____ (for and on behalf of the President of India)

Binding signature of Contractor Signed by _____ (for and on behalf of _____ duly authorized vide Resolution No _____ dated _____ of the Board of Directors of _____)

In the presence of

(Witnesses)

- 1.
- 2.

IV. APPENDICES

APPENDIX A – DESCRIPTION OF SERVICES

Note: This Appendix will include the final Terms of Reference worked out by the “Employer” and the Consultants during technical negotiations, dates for completion of various tasks, place of performance for different tasks/activities, specific tasks/activities/outcome to be reviewed, tested and approved by “Employer”, etc.

APPENDIX B - REPORTING REQUIREMENTS

Note: List format, frequency, and contents of reports; persons to receive them; dates of submission; etc. If no reports are to be submitted, state here “Not applicable.”

APPENDIX C – STAFFING SCHEDULE

(Include here the agreed (negotiated staffing schedule including the management of sub-contractors, if any)

APPENDIX D – Total COST OF SERVICES IN RUPEES

(Include here the rates quoted in the financial proposal or the negotiated rates, whichever is applicable)

APPENDIX E - DUTIES OF THE “EMPLOYER”

(Include here the list of Services, facilities and property to be made available to the Consultant by the “Employer”).

INSTRUCTIONS TO THE USER

(It will not form part of RFP. To be detached before sending the RFP to the short listed consultants.)

1. This document is the Standard Request for Proposals (SRFP) for use of Government Ministries / Department where the expenditure is to be financed from the budgetary resources of the Central Government. The document is based on the Manual of Policies and Procedure of Employment of Consultants (Nov 2005) (hereinafter called the manual) as may be amended from time to time . The SRFP must be used whenever possible in the selection of Consultants. However, specific assignments will require modification of the SRFP which shall be carried out based on the nature of the assignment / job, the selection process to be adopted and the assignment specific conditions of contract. This activity will be called “preparation of RFP”.
2. Before preparing an RFP, the user must be familiar with the Manual, provisions of the GFR and other guidelines issued by the Government of India from time to time. As mentioned in para

2.4.1 of the Manual, except in the case of low cost assignment where the procedure to be followed is mentioned in para 2.4.3 of manual, for all other consultancy contracts the process of engagement of consultants shall begin with an advertisement called “request for expression of interest” (EOI) for preparing a short list of consultants. The advertisement shall be released in at least one National Newspaper and on the Ministries Website. The advertisement should include in brief the broad scope of assignment / job, requirement of Ministry or department and last date of submission of the details. The detailed must be provided on the web site (preferably in the form of EOI document) which should mention scope of work, instruction to the consultants, evaluation criteria, details about submission regarding consultants past experience, man power details and financial details. The ministry or department shall furnish prescribed formats to be filled up by the consultant. Based on the response received the Ministry / Department will prepare a short list of those consultants based on the pre-qualification criteria as mentioned in the manual and as prescribed in the details of EOI. Details can be seen in the Manual. The short listed consultants are, thereafter, requested to submit their technical and financial proposals in the standard RFP prepared by the Ministry / Department for the assignment. The process of preparation of RFP will involve the following:

- (a) Preparation of the “data sheet” which contains assignment specific instructions to the consultants for preparation and submission of their proposal / bid.
- (b) Preparation of TOR.
- (c) Preparation of selection criteria including Technical Qualification (TQ) and financial criteria of the consultants.
- (d) Decision about the selection process.
- (e) Formats for technical and financial proposals.
- (f) Assignment / job specific conditions of contract.
- (g) Form of contract.

3. Evaluation of proposals will be carried out as per details given in paras 2.9 to 2.14 of the Manual. Negotiations, if any, will be done as per para 2.15 of the Manual.
4. In very special circumstances the employer may also modify suitably the general conditions of contract and the standard instructions to consultant. This should, however, be done only with legal and financial concurrence.
5. An important aspect of the preparation of RFP is the preparation of a draft Contract document. For this purpose the following guidelines will be followed:
 - a. The Standard Contract consists of four parts: the Form of Contract to be signed by the Client and the Consultant, the General Conditions of Contract, the Special Conditions of Contract, and the Appendices. General Conditions are generally not to be modified. Clauses in the Special Conditions will be used to modify the General conditions.
 - b. For assignments for which remuneration is being determined on the basis of the time actually spent by the Consultant in carrying out the services for example disinvestment process, project management services, advisory services etc., the Time-based contracts are recommended. In such cases generally the scope of the services cannot be established with sufficient precision, or the duration and quantity of services depends on variables that are beyond the control of the Consultant. In time-based contracts the Consultant provides services on a timed basis according to quality specifications, and Consultant's remuneration is based on (i) agreed upon unit rates for Consultant staff multiplied by the actual time spent by the staff in executing the assignment, and (ii) reimbursable expenses using actual expenses and/or agreed unit prices. This type of contract requires the Client to closely supervise Consultant and to be involved in the daily execution of the assignment.
 - c. Lump-sum contracts are normally used when definition of the tasks to be performed is clear and unambiguous, when the commercial risk taken by the Consultant are relatively low, and when therefore such Consultant are prepared to perform the assignment for an agreed predetermined lump-sum price. Such price is arrived at on the basis of inputs including rates – provided by the Consultant. The Client agrees to pay the Consultant according to a schedule of payments linked to the delivery of certain outputs, for example reports. A major advantage of the lump-sum contract is the simplicity of its administration, the Client having only to be satisfied with the outputs without monitoring the staff inputs. Studies are usually carried out on a lump-sum basis: for example, surveys, master plans, disinvestment reports, simple feasibility and engineering studies.
6. After the RFP for the assignment has been prepared it will be sent to the short listed consultants for obtaining their technical and financial proposals.
7. For evaluation of the RFP bids, suggested formats and criteria have been provided in the [manual](#).