# GOVERNMENT OF INDIA NORTH EASTERN COUNCIL SECRETARIAT NONGRIM HILLS :: SHILLONG – 793003

No. NEC/T/ILFS/2004 (Part)

Dated 14<sup>th</sup> November, 2007.

To

The Advisor,
IL&FS, Infrastructure Development Corporation Limited,
Mezanine Floor, Hotel Brahmaputra Ashok,
M.G. Road, Panbazar,
Guwahati – 781 001 (Assam)

Sub: Proposal for Upgradation of Dhodar-Ali Road on Public Private Partnership (PPP)

Ref: Your office letter dated 25<sup>th</sup> September, 2007.

- 1. In this connection it is brought out that NEC is only funding agency and not an implementing agency. The implementation of the projects is being done by the State PWDs. It would therefore be appropriate that implementing agencies are made aware of the proposal made by you.
- 2. Notwithstanding the above, representative from the State Governments are being requested to come to NEC for a presentation b IL&FS may explain their proposal to them for further action.

It is therefore requested that a presentation be arranged at NEC on  $04^{th}$  December, 2007 at 1600 hours at the Conference Hall.

( K. Haridosss ) Executive Engineer (T&C)

### Copy to:

- 1. The Chief Engineer, NEC, PWD, Chandmari, Guwahati -3.
- 2. Engineering in Chief, PWD, Nagaland, Kohima.
- 3. Chief Engineer PWD, Eastern Zone, PWD, Itanagar.

A copy of the IL&FS proposal is sent herewith. You are requested to forward your views by 25<sup>th</sup> November' 07. Please also make it convenient to attend the meeting / presentation.

Executive Engineer (T&C)

# Concept Note on Dhodar Ali Road

September 2007

# **Infrastructure Development Corporation**

UG Floor, 2A, Mahindra Towers, Bhikajir Cama Place, New Delhi 110 066

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### I. Introduction

### 1.1 Background

Assam is situated in North East Region of India, with its capital at Dispur, a suburb city near Guwahati. Assam is surrounded by Arunachal Pradesh, Nagaland, Meghalaya, Manipur, Mizoram and Tripura. These states are connected to rest of India through a narrow strip called Chicken's Neck. Assam is also connected to two countries Bhutan and Bangladesh.

Industrial infrastructure already exists in Assam. There are four oil refineries, several large and medium sector manufacturing industries that includes sugar mills, textile spinning units and processing houses, cement plants and fertilizer units. Apart from these Assam produces tea, petroleum resources, silk and is rich in bio diversity.

The Economy of Assam on the eve of the Eleventh Five Year Plan is in a better position than ever before. The growth rate of economy as compared to Ninth Five Year Plan has shown a continuously increasing trend over the years of the Tenth Five Year Plan. The annual average growth rate of GSDP in Assam as per advance estimate during 2005-06 is 6.14% as against Ninth Plan growth rate of 2.73%. The State is expecting an average annual growth rate of 5.59% of GSDP during the Tenth Five Year Plan against targeted growth rate of 6.2% of the Tenth Plan.

### 1.2 Dhodar-Ali Road

The project road Dhodar-Ali which at present has the status of State Highway under Assam Public Works Department (PWD) starts from km 409 of NH – 37 at Kamargaon and passes through the districts of Golaghat, Jorhat, Sibsagar and end at Joypur in the Dibrugarh district. The total length of Dhodar-Ali Road is 212 Km. Along the Dhodar-Ali particularly in Golaghat, Jorhat and Sibsagar Distirct there are rivers which are running parallel to the road. These are Dhansiri, Kakodong, Puthnodi and Suffrai rivers.

Enroute Dhodar-Ali links various cities/ regions of industrial, tourism, educational, religious and administrative importance namely Golaghat, Titabor, Mariani, Amguri, Nazira, Simulguri, Sapekheti and Namrup, and services as in important link to places like Wokha District, Tuli, Kokokchung, Nagnimora and Mon in Nagaland, Kanubari, Bimalpur, Khonsa in Arunachal Pradesh, Tinsukia, Digboi oil town, Madhapur Tin-Ali via Lakhipathar in Assam.

The traffic on Dhodar-Ali (Project Road) stretch is growing quite rapidly due to growth of Assam an also due to rapid economic development of the influence area. Apart from the growth, development of Dhodar-Ali and heritage site facilitates the rapid renewal of the socio-cultural linkage among various tribes.

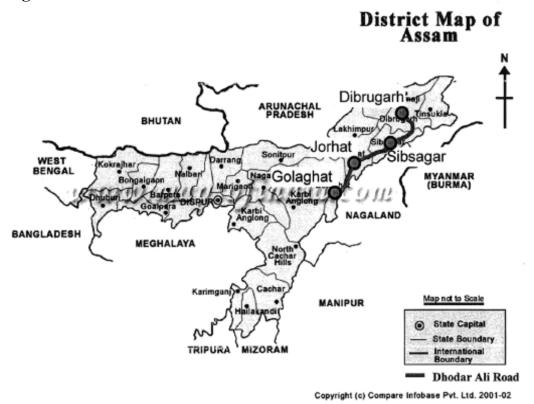
North Eastern Council (NEC) is a nodal agency of Government of India for planning, implementing and monitoring various development activities in North Eastern States. NEC had considered the importance of Dhodar-Ali and had taken up proposal for improvement of road geometrics. NEC is contemplating to enhance the traffic capacity and safety for efficient transshipment of goods as well as passenger traffic on this State Highway section.

Realizing this, NEC has taken up this stretch for widening to intermediate lanes.

The road pavement condition of Dhodar-Ali is really bad. The entire corridor is single lane facility and has to be upgraded to Two lane on suitable PPP format.

The alignment of the project road and its surrounding road network along with major towns and rivers is shown in **Figure 1**.

Figure 1: Location of Dhodhar-Ali Road



### II. The Proposal

It is proposed to upgrade the existing road from single lane to Two lane on suitable PPP format.

### 2.1 Alignment of the Road

The corridor commences at Kamargaon, passes via Golaghat – Titabor – Mariani – Amguri – Nazira – Simulguri – Sonari – Sapekhati – Namrup and then finally terminae at the Joypur in Dibrugarh District. **Table 1** shows various townships in the project road their respective districts.

	•			
Sl. No.	Name of Township	District	Length of road (Km)	
1.	Kamargaon	Golaghat	42	
2.	Golaghat	Golaghat	42	
3.	Titabor	Jorhat	51	
4.	Mariani	Joinat	51	
5.	Amguri			
6.	Nazira			
7.	Simulguri	Sibsagar	104	
8.	Sonari			
9.	Sapekhati			
10.	Namrup	Dibenaseh	15	
11.	Joypur	Dibrugarh		

Table 1 : Alignment of the Dhodar-Ali Road

The details of the alignment are as given below:

# 2.1.1 Dhodar-Ali Road within Golaghat district

Length of the project road in Golaghat district is 42 km and within Golaghat district, Dhodar-Ali road starts at Km 409 of NH - 37 at Kamargaon and passes through Golaghat.

- Kamargaon is the entry point to Golaghat district, Kaziranga National Park, Numaligarh Refinery Ltd. and Tea estates in surrounding areas.
- Goalghat is a district Head Quarter and has Tea Gardens in the surrounding areas. It is located at 28 km point of Dhodar-Ali.

NEC has taken up the proposal for improvement of road geometrics and strengthening of the road phase for Dhodar-Ali road and 37 km out of 42 km in Golaghat district is already been taken up for the improvement. So far, 29 km out of 37 km of the work is completed. The tentative alignment of the road is presented in **Figure 2**.

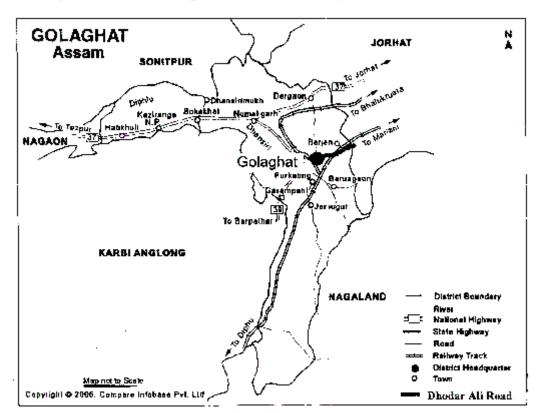


Figure 2: Alignment of the Proposed Road in Golaghat District.

# 2.1.2 Dhodar-Alig Road within Jorhat District

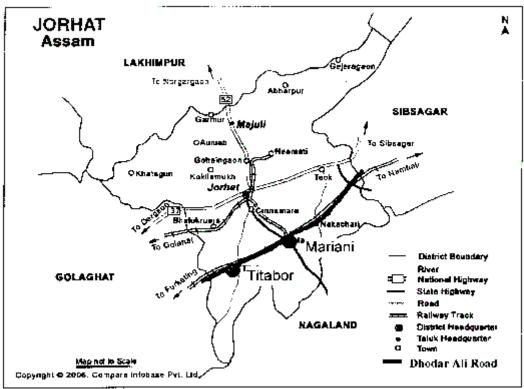
Length of the project road in Jorhat district is 51 km. It passes through the immediate vicinity of Titabor and Mariani.

- Titabor is famous for plywood factories, Tea Gardens, Seri culture centre, Regional Rice research centre etc.
- Mariani which is at 67 km point of Dhodar-Ali is a commercial town and has a Railway Junction, Saw mills, Plywood factories, Tea Gardens etc.

NEC has taken 34 km out of 51 km in Jorhat district for improvement. So far, 14 km out of 34 km has been completed by NEC.

The alignment of the road in Jorhat District is shown in **Figure 3**.

Figure 3 : Alignment of the Proposed Road at Jorhat District



# 2.1.3 Dhodar-Ali Road within Sibsagar district

Length of the project road in Sibsagar district is 104 km. It passes through the immediate vicinity of Amguri, Nazira, Simulguri, Sonari and Sapekhati.

- Amguri has a thermal power plant (NEEPCO), Tuli paper Mill and Tea Estates in the area.
- Nazira is a sub-divisional headquarter and regional headquarter of ONGC Ltd.
- Simulguri is a commercial town and has a railway junction.
- Sonari has a commercial township and Tea Estates.
- Sapekhati has a railway station.

NEC has taken 29 km out of 104 km in Sibsagar district for improvement. So far, 10 km out of 29 km has been completed by NEC.

The alignment of the proposed road in Sibsagar District is shown in **Figure 4**.

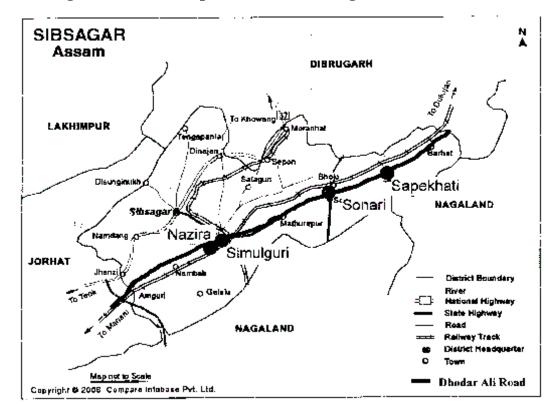


Figure 4: Alignment of the Proposed Road at Sibsagar District

# 2.1.4 Dhodar-Ali Road within Dibrugarh district

Length of the project road in Dibrugarh district is 104 km. It passes through immediate vicinity of Namrup and Joypur.

- Namrup has a thermal power plant, Fertilizer Plant of HFC Ltd. and Assam Petrochemical complex.
- Joypur is famous for the Tea Gardens, Plywood Factories and Collieries. Dhodar-Ali road ends at LBDT road at Joypur about 45 km away from Tinsukia, the major industrial town of Assam and 60 km away from Dibrugarh town.

The alignment of the proposed road in Dibrugarh District is shown in **Figure 5**.

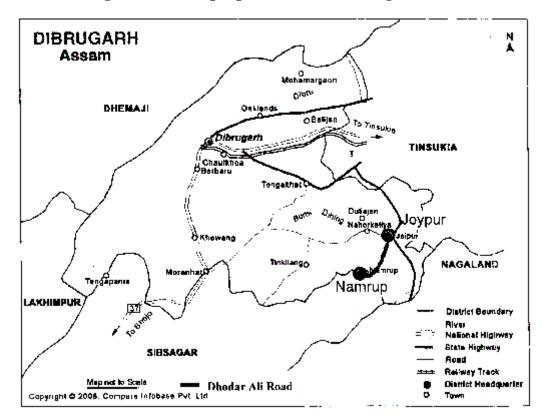


Figure: 5 The alignment of the proposed road in Dibrugarh Section

# 2.2 Improvement Work by NEC and UNESCO

As mentioned earlier, NEC had considered the importance of Dhodar-Ali and had taken up proposal for improvement of road geometrics. **Table 2** shows the portion of work completed and in progress by NEC.

Table 2:	<b>Improvement</b>	work by	<b>NEC</b>
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Sl. No.	Districts	Portion of Dhodar-Ali taken by NEC (Km)	Portion of Dhodar-Ali completed by NEC (Km)	Work in Progress (Km)
1	Golaghat	37	29	8
2	Jorhat	34	14	20
3	Sibsagar	29	10	19
4	Dibrugarh	0	0	0
	Total	100	53	47

So far, 53 km of length has been completed by NEC and rest 47 km is still in progress. The **Table 3** below shows the portion of work taken by NEC and UNESCO.

Sl. No.	Districts	Length in the District	Portion of Dhodar- Ali taken by NEC (Km)	Portion of Dhodar-Ali taken by UNESCO (Km)
1.	Golaghat	42	37	5
2.	Jorhat	51	34	17
3.	Sibsagar	104	29	75
4.	Dibrugarh	15	0	15
	Total	212	100	112

# 2.2.1 Bridge Work

There are 40 numbers of Bridges on the entire 212 km of Dhodar-Ali road. There are 5 Bridges in Golaghat District, 12 in Jorhat District, 22 in Sibsagar District and 1 in Dibrugarh District. **Table 4** below shows the type of Existing and Proposed Bridges on the project road.

**Table 4: Types of Existing and Proposed Bridges** 

Sl. No.	District	Bridge Number	Type of Existing Bridge	Type of Proposed Bridge	Length of the Bridge (m)
1		15/1	Brick masonry with RCC Slab single lane Bridge	RCC	140.9
2		17/3	Brick masonry with RCC Slab single lane Bridge	RCC	8.53
3	Golaghat	18/4	Brick masonry with RCC Slab single lane Bridge	RCC	13.7
4		23/1	Brick masonry with RCC Slab single lane Bridge	RCC	10.67
5		25/5	Brick masonry with RCC Slab single lane Bridge	RCC	19.8
6	Jorhat	43/1	Brick masonry with RCC Slab single lane Bridge	RCC	8.1
7		49/2	Brick masonry with RCC Slab single lane Bridge	RCC	14.7
8		62/1	Brick masonry with RCC Slab single lane Bridge	RCC	10
9		64/1	Brick masonry with RCC Slab single lane Bridge	RCC	13
10		64/1	RCC Double lane Bridge	RCC	13.7
11		68/1	Brick masonry with RCC Slab single lane Bridge	Brick masonry with RCC Slab single lane bridge	10.15
12		69/2	Brick masonry with RCC Slab single lane Bridge	Brick masonry with RCC Slab single lane Bridge	10.15
13		72/1	Brick masonry with RCC Slab single lane Bridge	Brick masonry with RCC Slab single lane Bridge	15

Sl. No.	District	Bridge Number	Type of Existing Bridge	Type of Proposed Bridge	Length of the Bridge (m)
14		74/1	SPT	SPT	16.6
15		74/2	SPT	SPT	12
16	Jorhat	82/1	Brick Abutment Bailey Single Lane Bridge	Brick Abutment Bailey Single Lane Bridge	26.5
17		85/1	Brick masonry with RCC Slab single lane Bridge	Brick Abutment Bailey Single Lane Bridge	28.3
18		94/3	RCC Double lane Bridge		86
19		102/3	SPT	SPT	25
20		104/1	SPT	SPT	15
21		114/1	SPT	SPT	35.5
22		116/1	SPT	SPT	8.4
23		118/1	Steel Bridge Single Lane	Steel Bride Single Lane	11.6
24		121/1	RCC Double lane Bridge		
25		127/1	Ancient Stone Arch Bridge	Ancient Stone Arch Bridge	33
26		129/1	Screw Pile Bridge Single Lane	Screw Pile Bridge Single Lane	10.9
27	a.u	137/2	SPT	SPT	8.4
28	Sibsagar	144/2	RCC Bridge under construction		49
29		150/1	SPT		10
30		152/1	Screw Pile Bridge		70.88
31		156/2	Screw Pile Bridge	SPT Bridge	13
32		159/1	Screw Pile Bridge	SPT Bridge	12
33		159/2	Screw Pile Bridge	SPT Bridge	40
34		163/1	Screw Pile Bridge	SPT Bridge	13
35		163/2	Screw Pile Bridge	SPT Bridge	9.3
36		172/2	Screw Pile Bridge	SPT Bridge	12.6
37		174/2	Screw Pile Bridge	SPT Bridge	19.6
38		177/2	Screw Pile Bridge	SPT Bridge	16
39		182/2	Oil Bailey Bridge	Oil Bailey Bridge	21
40	Dibrugarh	198/3	Double lane RCC Bridge	Double lane RCC Bridge	100

# 2.2.2 Boulder Protection Work

Along the Dhodar-Ali particularly in Golaghat, Jorhat and Sibsagar District there are rives which are running parallel to the road. These are Dhansari, Kakodong, Puthinodi and Suffrai Rivers. Road embankment protection work is required in areas where the road is running parallel to the rivers.

# 2.2.3 Road Side Drain cum Footpath

About 200 m in Golaghat, 4000 m each in Amguri, Nazira, Simulguri and Sonari and 2000 m in Namrup town road side drain cum footpath are to be provided.

# III. Benefits of the Improved Dhodar-Ali Road

The up-gradation of the Dhodar-Ali Road from Golaghat to Joypur will have the following benefits:

### 3.1 Saving in Travel Time

As mentioned earlier that the present condition of the road including most of the bridges is quite bad, the Upgradation of the project road will translate into huge travel time savings for the commuters.

# 3.2 Economic Integration in Project Influence Area

Development of new infrastructure facilities in the project influence area would generate potentially large number of additional trips, which use the project road. Development initiatives in the Project Influence Area will not only give rise to additional traffic movement but also accentuate the need for greater economic integration of the project influence area.

# 3.3 Safety

With improved condition of the road and better safety measures, it is assumed that there wil be less number of accidents and commuters will be having safe journey along this road.

### IV. Issues in Improvement of Dhodar-Ali Road

In spite of the obvious benefits of the proposed road, there are certain issues which need to be sorted out before going ahead. These issues are listed below:

# 4.1 Environmental Issues

The alignment passes through some very heavy forest area. The issue of the environmental clearances will have to be resolved.

### 4.2 Transfer of Land

It is extremely important that the land required for the widening be acquired before the concession is given to the private developer. Land Acquisition will carried out by Government of Assam and then the land will be transferred to NEC before the grant of concession. It is also important to carry out the land acquisition for any real estate / tourism project that may be given to the developer as sweetener.

### 4.3 Feasibility Study

The alignment proposed in this paper is only indicative. Moreover, it is proposed to construct the road on only one side (left) of the canal. However, it is extremely important to carry out a techno-economic study for the project to fix up alignment and other road geometrics of the proposed corridor.

#### Annexure I

# Terms of REFERENCE

# **Objective of the Assignment**

The objective of the assignment is the Upgradation of Dhodar-Ali Road which will not only improve connectivity in Upper Assam but also serve the through traffic from Arunachal Pradesh and Nagaland.

### **Broad Scope of Work**:

IIDC envisages following scope of work for the Project which shall inter alia:

- (a) Assist the NEC in structuring the development and Upgradation of Dhodar-Ali road stretches and operation and maintenance of these projects through private sector participation.
- (b) Examine the various project financing strategies that will optimize the extent of cross-subsidy that may be required for the project and the concession. It will entail the identification of relevant securitization strategies for the revenue generate through various activities during the project cycle.
- (c) Shall prepare on behalf of NEC all the necessary documentation, including lease agreement and O&M agreement.
- (d) Assist in developing the assignment up to the stage of technical close and award to the private sector developer (PSD)/EPC Contractor. For this purpose, IIDC shall undertake the project development activities for the assignment in phases as outlined below:
  - (i) Phase I: Preparation of business Plan for Dhodar-Ali Road for development of Public Private Partnership Basis.
  - (ii) Phase II: Financing Plan and Bid process management for selecting the PSD/EPC Contractor.
- (e) for each of the phases outlined in (d) above undertake its responsibilities in a manner and form as enunciated below:

### Phase I: Development of Business Plan:

IIDC shall prepare a business plan for both the projects, to ascertain the viability of development with private sector participation. This shall, entail the following:

- Detailed Reconnaissance Survey for the proposed alignments of Dhodar-Ali Road.
- Selection of technical consultant to carry out techno-commercial feasibility study including topographic surveys, traffic studies including projection, pavement study, economic and financial analysis, social & environment impact assessment study, re-settlement and rehabilitation

plan, rehabilitation and re-construction of cross-drainage structures, BOQ, risk assessment, market assessments etc. as may be required for obtaining necessary clearances.

- Selection legal consultant in order to review the legal and regulatory framework/s for project implementation.
- Discussion with various institutions and interested partners willing to participate in the development of the road on Private Sector Participation basis in the form of a "willingness to pay" survey.
- Formulation of Integrated Improvement and Maintenance Works Contract Framework for PSD/EPC Contractor linking cash flows with the performance or the output based.
- Revenue assessments, cash-flow disbursement schedule and evolve revenue securitization methods.
- Developing strategies for selection of entrepreneurs for undertaking construction, operation and maintenance and right of way protection.
- Formulation of measures related to the type of land uses along the proposed road so as to regulate the ribbon development in the abutting land.
- Business Plan and Project Structuring: The proposed business model would elaborate the appropriate form of privatization model by assessing the key factors that will enable successful implementation of the project. Business Plan will further provide for
  - Project Risk Assessment
  - List of Government Approvals required for the project
  - Estimation of Government Contribution if required

# Phase-II: Implementation Plan (including financing aspect and Bid process management)

In this stage, IIDC proposes 3 separate options for successful implementation of these two road projects:

### Option I:

**Payment on an Annuity basis followed by Tolling**: A private developer will be selected to develop the projects on annuity format. In this case the private developer will be handed over the project road. The private developer will carry out the design, construction finance, and operation & maintenance for the facility for a fixed period. The private developer will be paid a fixed amount (to be decided upfront on the basis of the financial bids) every year (or quarter) by NEC. NEC may recover parts of this amount by tolling / advertisement etc. or may decide to absorb this cost. The road will be handed over to NEC after a fixed period.

### **Option II**:

Bid out the project in full to a Private Developer to run on a BOT basis for a certain number of years (to be decided through discussion with the NEC or on the basis of financial bids). In this case also case the private developer will be handed over the project road for carrying out the design, construction finance and operation & management for the facility for a fixed period. However, the private developer will recover its cost through tolling/advertisement revenue. In order to meet the cost of development and O&M, NEC may have to give the developer VGF or real estate development rights. Additionally, the developer can be given the rights of tolling for the entire road of 212 Km. instead of merely 112 Km for which he will carry out the improvements.

In this case IIDC may carry out the entire Bid Process Management. The detail of the bid strategy is a illustrated below:

Pre-qualification (this part is common to both Option I & Option II):

- Formulation of pre-qualification criteria based on desk research and collating secondary information about real estate developers.
- Release of advertisement inviting expression of interest.
- Evaluation of expressions of interest and short-listing of eligible and interested bidders.
- Shortly after creation of the shortlist, IIDC shall hold a Developers' Conference to understand bidders' concerns and incorporate their suggestions while preparation of the Request for Proposal.

### Bid Solicitation and Evaluation:

IIDC manage bid solicitation and evaluation process, which shall comprise of the following.

- Formulation of the bid criteria in discussion with NEC.
- Commercial agreements(s) for Proposal (RFP) document comprising of Project information, Bid procedures, development controls and technical specifications and the commercial agreements(s), standard bidding formats, credential requirements.
- Release of RFP to the shortlisted bidders'.
- IIDC shall, if necessary, organize a Pre bid Conference to clarify any queries that bidders may have on the RFP in presence of members from NEC.
- Evaluation of technical proposals.
- After evaluation of the technical proposal, the financial evaluation shall be carried out and final ranking shall be obtained.

### Contract documentation:

IIDC shall be responsible for preparing the following project related documents:

- Land lease agreement, to be signed between the private sector developer and NEC.
- Construction agreement.
- O&M agreement between O&M operator and NEC.

# **Option III.**

IIDC will form a 50:50 Special Purpose Company (SPC) along with the NEC. A Proejct Development Fund may be created through equal contribution from both the parties. This fund would form the equity of the JV company. IL&FS may support the SPC by raising finance in the form of debt. Any Viability Gap funding required for successful implementation of the project will be filled through Subordinate Loan from NEC to the SPC. The SPC will bid the different stages of the project to EPC contractors through an transparent process and these EPC contractors will execute the work.

The various stages of this option will comprise:

Strategy for pre-qualification and preparation of necessary documentation: This task may include bid documentation, negotiations, and selection of PSD/EPC contractor for implementation of the assignment. In the case of an EPC contractor, Integrated Improvement and Maintenance Works Contract Framework has to be developed.

After completion of the project, the SPC will retain the right to recover their expenses from tolling/advertisements etc.

### Note:

- a. The Financial consideration of IIDC will be decided after choosing the right Option from the three different Options mentioned above.
- b. At all stages of Project Development process (in Option I, Option II and Option III) the private developer / EPC Contractor/ consultants fro various activities within the overall plan will be selected through a transparent bidding process.

# **Implementation Framework**:

- NEC shall entrust the project development exercise to IIDC as a Project Development and Promotion Partner (PDPP). IIDC shall carry the process of project development forward.
- NEC shall constitute a Project Development Committee (PDC) for granting timely approvals required for undertaking project development activities including technical study and project

- documentation. This would act as a decision making body for taking process forward for the project.
- The Technical and Legal consultant shall be appointed through limited circulation of RFP to the reputed consultants. The selection shall be done on the basis of QCBS system of selection. Thus, the procurement process shall ensure time bound and cost effective procurement of quality consultants. IIDC shall procure the technical consultant for carrying out the study for the project.
- All the cost incurred towards project development like fee of technical and legal consultant, and professional fee of IIDC shall be borne by NEC. However, IIDC shall assist in procurement of the consultant and supervise the study.
- All the expenses towards Project Development which are made NEC shall be recovered from the successful bidders at the time of signing of the contracts.

# **Fees and Payment Structure**

IIDC shall be entitled to receive the following fees for the services rendered by it towards the project development fee

### (a) Professional Fees

IIDC will be entitled to receive, a payment of 2.5 lacs per month (plus applicable service tax) for the project development period, subject to a maximum of 24 months. The fees are inclusive of out of pocket expenses comprising of travel, boarding & lodging, local travel and communications.

### (b) Success Fee

IIDC shall be entitled to receive a Success Fee, after the successful procurement of the developer. The success fee shall be 1% of the Landed Project Cost and shall be directly paid by the successful bidder to IIDC.

The definition of Landed Project Cost is given at Annexure 4

### **Activity Schedule**

It is estimated that the aforementioned process of Project Development on PPP basis is expected to taken around 24 months, subject to provision of all relevant data, expeditious approvals and clearances from Government of Assam. The detailed activity schedule is as given below:

Award of work by NEC to IIDC	D	
Selection of Technical Consultants	D+1 M	
Completion of Feasibility Study Report by the Technical Consultant	D+6 M	
RFQ process	D+10 M	
Completion of DPR by the Technical Consultant	D+12 M	
Discussions and finalization of bidding parameters		
Issue of RFP	D+15 M	
Evaluation of Bids and Selection of preferred Bidder	D+17 M	
Negotiations & signing of concession agreement		
Financial Close of the preferred bidder	D+24 M	

D: denotes of signing of MoA

M: indicates Months

Time lines mentioned above are indicative and subject to expeditious approvals and clearance from Project Development Committee (PDC).

### **Annexure II**

Landed Project Cost

Landed Project Cost may be fined as follows:

- a) The costs incurred for carrying out Project related activities such as formulation, development, design, engineering, construction, operation, management consultancy, etc.
- b) Total capital outlay on the Project, which includes, material, labour transport, consumables, testing, commissioning overheads, sundries, contingencies, insurance, supervision, etc. IT shall also include Government grant (VGF or under any other format).
- c) Any fees (including professional and success fees), commissions, levies and taxes.
- d) Expenses related to fund mobilization such as fees for financial service, brokerage, interest, commission, publicity expenses, etc.
- e) Interest during construction.
- f) Project Cost of Real Estate Component, including land cost (if any)
- g) Environment and Social Impact Mitigation Cost as per the requirement of approvals.

#### Annexure III

# 1. <u>Infrastructure Leasing and Financial Services (ILFS) Organisation</u> <u>Background</u>

IL&FS is one of the largest Financial Institutions (FIs) in the country, playing a catalytic role in the development of infrastructure projects across the country on PPP basis, and complementary array of financial services. IL&FS was promoted by the Unit Trust of India (UTI), Central Bank of India and Housing Development Finance Corporation (HDFC) in 1987. Apart from the original

promoters, the current shareholders include the State Bank of India, Orix Corporation (Japan), International Finance Corporation (IFC) Washington, Credit Commercial de France (CCF) and Indivest Pte Limited (an affiliate of Govt. of Singapore Investment Corporation).

IL&FS Infrastructure Development Corporation Limited (IIDC), a wholly owned subsidiary, is the infrastructure development arm of IL&FS. IIDC has been established to domicile the extensive portfolio of infrastructure project development activities of IL&FS and to create other synergistic opportunities with State and Central Government/Public sector agencies.

IIDC has experience of working with the Central and a number of State Governments, playing a significant role in the evolution of project development from conceptualization to commissioning, formulating new policy paradigms, legal frameworks, regulatory structures, new financial processes and instruments aimed at delivery of commercialized projects in various infrastructure sectors ranging from transportation, water & sanitation, housing, industrial infrastructure, social infrastructure etc. We have an experienced professional team with diverse skill sets and core competence profile mapped to its requirements in the area of technical, financial, legal, risk management, environment and social management and process management.

Presently IIDC is working with the Governments of Punjab, Kerala, Andhra Pradesh, Jharkhand, Chhattisgarh, West Bengal, Assam, Goa, Meghalaya, Mizoram etc, through either Project Development and Promotion Partnership (PDPP) arrangement or Joint Venture Company or exclusive MOAs for implementation of infrastructure projects with Private Sector Participation. IIDC is also associated with the various Central Government Ministries and Departments like Ministry of Commerce and Industries, Ministry of Urban Affairs, Department of Company Affairs etc.

We have also been associated with Ministry of Home Affairs for the Development of four integrated Check Post at Indo Nepal Border.

Our parent, IL&FS also also also a PDPP arrangement with the Government of Tripura, and joint venture companies with the Governments of Rajasthan (PDCOR & RIDCOR), Tamil Nadu (TNRDCL) and West Bengal (with Haldia Development Authority) for infrastructure project development.

We also take this opportunity to mention that IL&FS is the Executing Agency for US\$ 100 million under Private Sector Infrastructure Facility (PSIF)-II of the Asian Development Bank (ADB) for assistance to the eligible projects in the private sector in four selected states.

### II. IL&FS Group Road Sector Experience

# (I) Sponsorship

# (1) Rau Pitabpur Roll Road

Commissioned in November 1993, the Rau Pitampur road was the first toll road in India. The project involved the strengthening of 11.5 km of an existing 2-lane State Highway. The project connects the town of Rau with the industrial city of Pitampur and has been domiciled in a Special Purpose Vehicle (SPV), 'MP toll Roads Limited'. The construction of the road was completed within the scheduled time and within budgeted cost.

**Project Cost:** Rs. 6.61 Crore

### (2) Vadodara Halol Toll Road

Commissioned in October 2000, the project envisaged the widening the strengthening of 32 km of the existing 2-lane State Highway to a 4-lane expressway connecting Vadodara with the industrial city of Halol. The project has been domiciled in an SPV, 'Vadodara Halol Toll Road Limited'. The construction of the road completed within the scheduled time and budgeted cost.

The project is a World Bank best practice example for Environmental Risk Mitigation & Social Rehabilitation Plan.

Project Cost: Rs. 161.1 Crore

### (3) Delhi – Noida Toll Bridge

The Delhi-Noida Toll Bridge connects South Delhi with Noida. The project includes a 550 metre, eight-lane bridge over the river Yamuna along with the approach roads in the South Delhi and Noida end. Commissioned in February 2001, the Delhi Noida toll bridge is amongst the first large private sector initiatives in the surface transport sector in India. This is also the only Greenfield project of its size in India that has been completed in PPP outside budgetary resources, the project was commissioned forth months ahead of schedule.

IL&FS has received 'best practice' recognition in terms of the construction practices followed.

Project Cost: Rs. 408.2 Crore

### (4) Ahmedabad Mehsana Toll Road

The Project involved four laning of 52 km of the existing State Highway linking Ahmedabad and Mehsana, undertaken by Ahmedabad Toll Road Company Limited (AMTRL). The State Highway links Ahmedabad, the commercial capital of Gujarat, to Mehsana, an important oil town to the north. The road caters to significant levels of commercial traffic movement between Gujarat and parts of North India.

Commissioned in February 2003, the project was completed 8 months ahead of schedule and within budgeted cost.

Project Cost: Rs. 323.05 Crore

### (5) East Coast Road

The Tamil Nadu Road Development Corporation implemented the rehabilitation and maintenance of the 113.2 km East Coast Road between the cities of Chennai and Pondicherry. The SPV is a joint venture of IL&FS and the Tamil Nadu Industrial Development Corporation Limited – a Government of Tamil Nadu entity. The project was commissioned in March 2002.

The ECR showcases state-of-art developments in road construction technologies. The project was completed within 90% of estimated time frames and budgets.

**Project Cost:** Rs. 61.00 Crore

### (6) North Karnataka Expressway

The Belgaum-Maharashtra Border Road falls on the NH-4, high-traffic density corridor connecting, Chennai, Bangalore, Pune and Mumbai. The project commenced on June 20, 2002 with December 19, 2004 set as the project completion date.

The project achieved provisional completion five months ahead of schedule, on July 19, 2004. The entire stretch has been opened to traffic.

Project Cost: Rs. 542.32 Crore

### (7) The Narmada Toll Bridge

Narmada Infrastructure Construction Enterprise implemented the construction and operation of a two-lane toll bridge at Zadeshwar across the River Narmada alongwith the approach roads on the National Highway-8. The project was commissioned in November 2000.

Project Cost: Rs. 144.05 Crore

# (8) Thiruvananthapuram City Roads Improvement Project

Thiruvananthapuram Road Development Corporation Limited (TRDCL), the Consortium of ITNL and PLL have been awarded the first intra-city Road Improvement Project in the country. The project envisages the improvement of the 42 km city road network, spanning 13 corridors, 63 junctions, two flyovers and a underpass in Thiruvananthapuram.

Financial Close for the Project was achieved in a record 30 days. The project is scheduled for commissioning in July 2006.

# Project Cost: Rs. 221.39 Crore (9) Western Freeway Sea Link Project

IL&FS and Maharashtra State Road Development Corporation (representing the Government of Maharashtra) have entered into an agreement for developing the Worli-Nariman Point section of the Western Freeway Link Project. The project is to be sub-divided into six major links aggregating 14.77 km. To be implemented as a toll facility, the sea link route will have major cable stayed bridges and short-term span stayed bridges.

**Project Cost: Rs. 2000 – 2500 Crore** 

### (10) Kerala High Speed Corridor Project

The Government of Kerala (GoK) is developing a 525 km, Access Controlled High Speed Corridor (HSC) traversing the State from North to South connecting Kasargod and Thiruvananthapuram on a commercial format. GoK is also considering the development of Activity Nodes – industrial and commercial centers along te proposed corridor. The project is to be taken up in three phases, spread over 15 years.

IL&FS Government of Kerala are in the process of incorporating a SPV to undertake the activity. Based on the financial viability the project is to be implemented in three phases.

Project Cost: Rs. 2500 Crore (Estimated)

### (11) Kotakatta – Kurnool Road Project

Design, Construction, Development, Finance, Operation and Maintenance of "Km 135.469 (End of proposed Kotakatta Bypass) to km 211.00 (Kurnool), covering 74.651 kilometers" on NH-7 on BOT Annuity basis in the State of Andhra Pradesh. The Concession has been awarded to the Consortium of Infrastructure Leasing & Financial Services Limited and

IL&FS Transportation Networks Limited. The SPV has been formed in the name of Andhra Pradesh Expressway Limited (APEL). The Concession has been awarded to APEL for a period of 20 years from the commencement Date including construction period of 30 months.

Project Cost: Rs. 745 Crore

# (12) Rajkot – Jetput – Gondal Project

The project envisages conversion of Jetput – Gondal – Rajkot and Rajkot Bypass section of NH-8B an access controlled four-lane highway with service lanes along certain sections and strengthening of the existing lanes and improvements to Gondal – Rajkot section. The Project is promoted by Infrastructure Leasing & Financial Services Limited (IL&FS) and IL&FS Transportation Networks Limited (ITNL). A Special Purpose Vehicle (SPV), "West Gujarat Expressway Limited" (WGEL), would implement the project. WGEL, the Concessionaire, would implement, operate and maintain the Project facilities for a total period of 20 years.

**Project Cost:** Rs. 240 Crore

### (II) Advisory

# (1) The Second Vivekananda Toll Bridge Project

The project envisages a 6.1 km, integrated 6-lane bridge alongwith approach road network over the River Hoogly, 50 metres downstream of the present Vivekananda Bridge. The project bridge will connect NH2 – NH6, Durgapur Expressway on the West Bank with NH34 – Nh35, Beghoria Expressway and the Netaji Subhash Chandra Bose Airport on the East Bank. The project is scheduled for completion by 2007.

### Project Cost: Rs. 646.88 Crore

Rolle of IL&FS Merchant Banker Lenders' Engineer Project Advisor

### (2) Pune – Sirur Toll Road

The project envisages the widening and strengthening of 54 km of the 2-lane State Highway connecting Pune with Sirur to a 4-lane corridor. The SPV involved in Ashoka Infrastructure Private Limited (AIPL). The project is expected to commission by May 2005.

Project Cost: Rs. 137.52 Crore

### Role of IL&FS

Merchant Banker Lenders' Engineer Project Adviser Toll Auditor

### (3) Nashik – Niphad Toll Road

The project, connecting the city of Nashik with Niphad, envisages the upgrading, strengthening and widening of 22 km of an existing 5.5 - 7 m State Highway to a 7 - 12 m corridor. The project has been domiciled in a Special Vehicle under the name and style of I.S. Infrastructure and Buildcon Private Limited (ISIBPL). The project was commissioned in February 2004.

Project Cost: Rs. 16.55 Crore

### Role of IL&FS

Merchant Banker Lender's Engineer Project Advisor Toll Auditor

# (4) Jabalpur – Narsinghpur – Piparia Toll Road

The project connecting Jabalpur with Piparia Envisages the reconstruction, strengthening, widening and rehabilitation of 140 km of a single lane State Highway to a 5.5 m corridor. The project is expected to commission by December 2004.

Project Cost: Rs. 80.72 Crore

Role of IL&FS Merchant Banker Lenders' Engineer Project Advisor Toll Auditor

### (5) Jas Toll Road

The project envisages the widening and rehabilitation of 32.5 km of a 2-lane National Highway (NH-4) to a 4-lane corridor with a provision of sixlaning. The project was commissioned in April 2004.

**Project Cost:** Rs. 221.72 Crore

### Role of IL&FS

Merchant Banker Lenders' Engineer Toll Auditor

### (6) Karnataka Road Development Corporation Limited - Bridges

Karnataka Road Development Corporation Limited (KRDCL) has been mandated by the Government of Karnataka to finance, build, operate and maintain 80 Bridges with recovery of the investments through toll charges at the various locations across the State.

#### Role of IL&FS

IL&FS has been mandated to develop a Tolling Program to enable KRDCL to recover the investment on these bridges.

### (7) Dewas Bypass Toll Road

The project envisages the construction of a 19.80 km two-lane cement concrete road from km 159/400 of Bhopal – Ujjain Road (State Highway – 18) to km 577/600 of Agra – Mumbai Road (National Highway – 3). Estimated to cost Rs. 56.50 crore, the project was commissioned in May 2004.

### Role of IL&FS

Lenders' Engineer

Project Cost: Rs. 56.5 Crore

### (8) Nanded City Roads Project

As part of the city development initiatives for upgrading the infrastructure within the city and peripheral areas around it, the city of Nnaded has identified projects for implementation. Nanded is among the list of eligible cities shortlisted for grant assistance under the proposed Jawaharlal Nehru Urban Renewal Mission (NJJURM). IL&FS has been appointed as the programme manager and will provide all services to Municipal Corporation of Nanded related to Financial Appraisal and advice regarding funding of the Projects as well as their implementation and each of its various Constituents projects, as required by Municipal Corporation of Nanded. ITNL has been mandated by IL&FS to monitor the reparation of DPR and construction supervision during construction stage.

### **Annexure IV: State Specific Road Companies**

# (I) Road Development Corporation of Rajasthan

### (1) Introduction

Road Development of Corporation of Rajasthan Ltd (RIDCOR), incorporated in October 2004, is a 50:50 Joint Initiative of Government of Rajasthan (GoR) and IL&FS.

RIDCOR is managed by a high powered Board comprising three nominees from GoR, three nominees from IL&FS and one independent director reflecting the Company's public – private partnership identity.

# (2) The Mega Highway Project

(a) As part of the 'Mega Highway Project', Government of Rajasthan has proposed to improve the following important North-South road corridors/road stretches, aggregating to 1053 km of two lanes with paved/hard shoulder configuration including provision of bye-passes, Road Over Bridges and geometric improvements wherever found economically feasible:

Name of Corridor	Length (Km)
Phalodi to Ramji Ki Gol	292
Hanumangarh to Kishangarh	407
Alwar To Sikandra	81
Lalsot to Kota and Baran to Jhalawar	273
Total	1053

(b) The Mega Highways Project is the single largest road sector project in the country taken up under Public-Private Partnership (PPP) framework. The Project is expected to emerge as a benchmark for development of roads in the PPP framework and would also position Rajasthan as the most favoured investment and tourism destination in the country.

### (II) Tamil Nadu Road Development Company

# (1) Introduction

Tamil Nadu Road Development Company Ltd. (TNRDC), incorporated in May 1998, is a 50:50 Joint Initiative Tamil Nadu Industrial Development Corporation Ltd. (TIDCO), the investment arm of Government of Tamil Nadu (GoTN) and IL&FS.

TNRDC was set up with the mandate of developing road sector initiatives by catalyzing private sector resources and investments under Public-Private Partnership (PPP) framework.

TNRDC is managed by a high powered Board comprising three nominees from TIDCO, three nominees from IL&FS and three independent directors reflecting the Company's public-private partnership identity.

East Cost Road (ECR) is an important tourism road corridor in Tamil Nadu connecting Chennai with Cuddalore through Pondicherry. The road was formed in 1998 under an Asian Development Bank funded project. Within two years of its formation, ECR started showing signs of distress adversely affecting its service quality, Prevalence of dangerous curves and other geometric deficiencies led to occurrence of number of accidents.

### Note:

This is a re-composed version of the papers forwarded by NEC.