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LOAN NUMBER 2443-IND

LOAN AGREEMENT  
(Ordinary Operations)  
(Bihar State Highways Project)

between

INDIA

and

ASIAN DEVELOPMENT BANK

DATED 10 NOVEMBER 2008

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LAL:IND 41127

**LOAN AGREEMENT  
(Ordinary Operations)**

LOAN AGREEMENT dated 10 November 2008 between INDIA acting by its President (hereinafter called the "Borrower") and ASIAN DEVELOPMENT BANK (hereinafter called "ADB").

WHEREAS

(A) the Borrower has applied to ADB for a loan for the purposes of the Project described in Schedule 1 to this Loan Agreement;

(B) the Project will be carried out by the State of Bihar (hereinafter called the "State") through its Road Construction Department, and for this purpose the Borrower will make available to the State the proceeds of the Loan provided for herein upon terms and conditions satisfactory to ADB;

(C) the Borrower has also applied to ADB for technical assistance in an amount equivalent to one million dollars (\$1,000,000) for Institutional Strengthening of the Bihar Road Sector, which ADB will finance in conjunction with the Project on a grant basis from its technical assistance funding program; and

(D) ADB has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions set forth herein and in the Project Agreement of even date herewith between ADB and the State;

NOW THEREFORE the parties hereto agree as follows:

**ARTICLE I**

**Loan Regulations; Definitions**

Section 1.01. All the provisions of the Ordinary Operations Loan Regulations Applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001, are hereby made applicable to this Loan Agreement with the same force and effect as if they were fully set forth herein, subject, however, to the following modifications thereof (said Ordinary Operations Loan Regulations as so modified being hereinafter called the "Loan Regulations"):

(a) Section 3.03 is deleted and the following is substituted therefor:

**Commitment Charge; Credit.** (a) The Borrower shall pay a commitment charge on the unwithdrawn amount of the Loan at the rate and on the terms specified in the Loan Agreement.

(b) ADB shall provide to the Borrower a credit at the rate specified in the Loan Agreement, which credit shall remain fixed for the term of the Loan. ADB shall apply the amount of the credit against the interest payable by the Borrower.

(b) Section 3.06 is deleted and the following is substituted therefor:

(a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be reduced, ADB shall provide a Rebate to any Borrower with an outstanding Loan on which a higher Fixed Spread is applicable. The amount of the Rebate shall be determined by multiplying (i) the difference between the Fixed Spread applicable to the outstanding Loan and the Fixed Spread that will be applied to new Loans (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the lower Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB achieving savings, ADB shall provide a Rebate to the Borrower. The amount of the Rebate shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall apply the amount of the Rebate against the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

(c) Section 3.07 is deleted and the following is substituted therefor:

(a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be increased, any Borrower with an outstanding Loan on which a lower Fixed Spread is applicable shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the difference between the Fixed Spread that will be applied to new Loans and the Fixed Spread applicable to the outstanding Loan (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the higher Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB incurring additional costs, the Borrower shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall add the amount of the Surcharge to the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

Section 1.02. Wherever used in this Loan Agreement, unless the context otherwise requires, the several terms defined in the Loan Regulations have the respective meanings therein set forth, and the following additional terms have the following meanings:

(a) "Consulting Guidelines" means ADB's Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (2007, as amended from time to time);

(b) "EMP" means the environmental management plan included in the IEE for each of the Project roads;

(c) "Goods" means equipment and materials to be financed out of the proceeds of the Loan; including related services such as transportation, insurance, installation, commissioning, training, and initial maintenance, but excluding consulting services;

(d) "IEE" means the initial environmental examination prepared in respect of each of the Project roads;

(e) "Procurement Guidelines" means ADB's Procurement Guidelines (2007, as amended from time to time);

(f) "Procurement Plan" means the procurement plan for the Project dated 19 August 2008 and agreed between the Borrower, the State, and ADB, as updated from time to time in accordance with Procurement Guidelines, Consulting Guidelines, and other arrangements agreed with ADB;

(g) "Project Executing Agency" for the purposes of, and within the meaning of, the Loan Regulations means the State acting through RCD, or any successor thereto acceptable to ADB, which is responsible for the carrying out of the Project;

(h) "Project roads" means the roads to be reconstructed and rehabilitated under the Project;

(i) "RCD" means the Road Construction Department of the State;

(j) “RRP” means ADB’s Report and Recommendation of the President to the Board of Directors for this Project;

(k) “RP” means the resettlement plan prepared in respect of each of the Project roads;

(l) “SHDP” means State Highway Development Program of the State; and

(m) “Works” means construction or civil works to be financed out of the proceeds of the Loan, including services such as drilling or mapping, and Project related services that are provided as part of a single responsibility or turnkey contract, but excluding consulting services.

## **ARTICLE II**

### **The Loan**

Section 2.01. (a) ADB agrees to lend to the Borrower from ADB’s ordinary capital resources an amount of four hundred twenty million Dollars (\$420,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.06 of this Loan Agreement.

(b) The Loan has a principal repayment period of 20 years, and a grace period as defined in paragraph (c) of this Section.

(c) The term “grace period” as used in paragraph (b) of this Section means the period prior to the first Principal Payment Date in accordance with the amortization schedule set forth in Schedule 2 to this Loan Agreement.

Section 2.02. The Borrower shall pay to ADB interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate for each Interest Period equal to the sum of LIBOR and 0.60% as provided by Section 3.02 of the Loan Regulations, less a credit of 0.40% as provided by Section 3.03 of the Loan Regulations.

Section 2.03. The Borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the Loan (less amounts withdrawn from time to time), commencing sixty (60) days after the date of this Loan Agreement.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 15 June and 15 December in each year.

Section 2.05. The Borrower shall repay the principal amount of the Loan withdrawn from the Loan Account in accordance with the provisions of Schedule 2 to this Loan Agreement.

Section 2.06. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management:

- (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, whether withdrawn and outstanding or unwithdrawn, to an Approved Currency;
- (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding from a Floating Rate to a Fixed Rate, or vice versa; and
- (iii) the setting of limits on the Floating Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on said Floating Rate.

(b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by ADB shall be considered a "Conversion", as defined in Section 2.01(6) of the Loan Regulations, and shall be effected in accordance with the provisions of Article V of the Loan Regulations and the Conversion Guidelines.

### **ARTICLE III**

#### **Use of Proceeds of the Loan**

Section 3.01. The Borrower shall make the proceeds of the Loan available to the State upon terms and conditions satisfactory to ADB and shall cause the State to apply such proceeds to the financing of expenditures on the Project in accordance with the provisions of this Loan Agreement and the Project Agreement.

Section 3.02. The Goods, Works and consulting services to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan among different categories of such Goods, Works and consulting services shall be in accordance with the provisions of Schedule 3 to this Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.

Section 3.03. Except as ADB may otherwise agree, all Goods, Works and consulting services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where Goods, Works or consulting or services have not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 3.04. Except as ADB may otherwise agree, the Borrower shall cause all Goods, Works and consulting services financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The closing date for withdrawals from the Loan Account for the purposes of Section 9.02 of the Loan Regulations shall be 31 July 2012 or such other date as may from time to time be agreed between the Borrower and ADB.

## **ARTICLE IV**

### **Particular Covenants**

Section 4.01. (a) The Borrower shall cause the State to carry out the Project with due diligence and efficiency and in conformity with sound administrative, financial, engineering, environmental and state road development practices.

(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform its obligations, and cause to be performed all obligations of the State, as set forth in Schedule 5 to this Loan Agreement and the Project Agreement.

Section 4.02. The Borrower shall make available to the State, promptly as needed, the funds, facilities, services and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 4.03. The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.

Section 4.04. The Borrower shall take all action which shall be necessary on its part to enable the State to perform its obligations under the Project Agreement, and shall not take or permit any action which would interfere with the performance of such obligations.

## **ARTICLE V**

### **Effectiveness**

Section 5.01. A date ninety (90) days after the date of this Loan Agreement is specified for the effectiveness of the Loan Agreement for the purposes of Section 10.04 of the Loan Regulations.

## **ARTICLE VI**

### **Miscellaneous**

Section 6.01. Any of the Secretary, Additional Secretary, Joint Secretary, Director, or Deputy Secretary, in the Department of Economic Affairs of the

Ministry of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 12.02 of the Loan Regulations.

Section 6.02. The following addresses are specified for the purposes of Section 12.01 of the Loan Regulations:

For the Borrower

The Secretary to the Government of India  
Ministry of Finance  
Department of Economic Affairs  
North Block  
New Delhi – 110 001  
India

Cable Address:

ECOFAIRS  
NEW DELHI

Facsimile Number:

91 11 23094075  
91 11 23092511

For ADB

Asian Development Bank  
P.O. Box 789  
0980 Manila, Philippines

Facsimile Numbers:

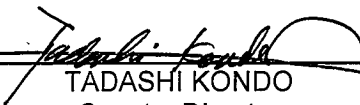
(632) 636-2444  
(632) 636-2340.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names and to be delivered at the principal office of ADB, as of the day and year first above written.

INDIA

By  \_\_\_\_\_  
GOVIND MOHAN  
Director (Infra)  
Department of Economic Affairs

ASIAN DEVELOPMENT BANK

By  \_\_\_\_\_  
TADASHI KONDO  
Country Director  
India Resident Mission

## SCHEDULE 1

### Description of the Project

1. The objective of the Project is to improve transport efficiency of the road network in the state of Bihar by (i) improving the state highway network, (ii) facilitating safe and appropriate road usage, (iii) increasing efficiency of transport services, and (iv) enhancing the capacity of the State government for road asset development and management.

2. The Project shall consist of the following:

#### Part A: Rehabilitation and Reconstruction

Rehabilitation and reconstruction of about 820km of state highways identified under the SHDP, which will include two-laning of the existing roads; strengthening of existing culverts and bridges; construction of new bridges and cross drainage structures; and construction of structures for resettlement and rehabilitation.

#### Part B: Institutional Development

Provision of equipment to enhance the sector capacity of the State government in areas such as quality control, survey and design, road safety, and control of overloading and vehicle emissions.

3. The Project is expected to be completed by 31 January 2012.

**SCHEDULE 2****Amortization Schedule****(Bihar State Highways Project)**

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (Installment Share). If the proceeds of the Loan shall have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by ADB by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

| <u>Payment Due</u> | <u>Installment Share</u><br>(Expressed as a %) |
|--------------------|--|
| 15 Dec 2013        | 2.500000                                       |
| 15 Jun 2014        | 2.500000                                       |
| 15 Dec 2014        | 2.500000                                       |
| 15 Jun 2015        | 2.500000                                       |
| 15 Dec 2015        | 2.500000                                       |
| 15 Jun 2016        | 2.500000                                       |
| 15 Dec 2016        | 2.500000                                       |
| 15 Jun 2017        | 2.500000                                       |
| 15 Dec 2017        | 2.500000                                       |
| 15 Jun 2018        | 2.500000                                       |
| 15 Dec 2018        | 2.500000                                       |
| 15 Jun 2019        | 2.500000                                       |
| 15 Dec 2019        | 2.500000                                       |
| 15 Jun 2020        | 2.500000                                       |
| 15 Dec 2020        | 2.500000                                       |
| 15 Jun 2021        | 2.500000                                       |
| 15 Dec 2021        | 2.500000                                       |
| 15 Jun 2022        | 2.500000                                       |
| 15 Dec 2022        | 2.500000                                       |
| 15 Jun 2023        | 2.500000                                       |
| 15 Dec 2023        | 2.500000                                       |
| 15 Jun 2024        | 2.500000                                       |
| 15 Dec 2024        | 2.500000                                       |
| 15 Jun 2025        | 2.500000                                       |
| 15 Dec 2025        | 2.500000                                       |
| 15 Jun 2026        | 2.500000                                       |
| 15 Dec 2026        | 2.500000                                       |
| 15 Jun 2027        | 2.500000                                       |
| 15 Dec 2027        | 2.500000                                       |

|             |                 |
|-------------|-----------------|
| 15 Jun 2028 | 2.500000        |
| 15 Dec 2028 | 2.500000        |
| 15 Jun 2029 | 2.500000        |
| 15 Dec 2029 | 2.500000        |
| 15 Jun 2030 | 2.500000        |
| 15 Dec 2030 | 2.500000        |
| 15 Jun 2031 | 2.500000        |
| 15 Dec 2031 | 2.500000        |
| 15 Jun 2032 | 2.500000        |
| 15 Dec 2032 | 2.500000        |
| 15 Jun 2033 | <u>2.500000</u> |
| Total       | 100.000000      |

2. If the proceeds of the Loan shall not have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by ADB by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. Withdrawals made within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by ADB by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by ADB under the Currency Hedge Transaction relating to said Conversion; or (ii) if ADB so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

### SCHEDULE 3

#### Allocation and Withdrawal of Loan Proceeds

##### General

1. The table attached to this Schedule sets forth the Categories of Goods, Works, and consulting services to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan to each such Category (hereinafter called the "Table"). (Reference to "Category" or "Categories" in this Schedule is to a Category or Categories of the Table).

##### Percentages of ADB Financing

2. Except as ADB may otherwise agree, the items of the Categories listed in the Table shall be financed out of the proceeds of the Loan on the basis of the percentages set forth in the Table.

##### Reallocation

3. Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the Table,

(a) if the amount of the Loan allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, by notice to the Borrower, (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Loan which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures, and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures thereunder shall have been made; and

(b) if the amount of the Loan then allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, by notice to the Borrower, reallocate such excess amount to any other Category.

##### Disbursement Procedures

4. Except as ADB may otherwise agree, the Loan proceeds for financing Goods, Works, and consulting services shall be disbursed in accordance with ADB's "Loan Disbursement Handbook" dated January 2007 (ADB's Loan Disbursement Handbook), as amended from time to time, by adopting direct payment and reimbursement procedures.

##### Statement of Expenditures

5. The statement of expenditures (SOE) procedure may be used for reimbursement of eligible expenditures in accordance with ADB's Loan Disbursement Handbook and detailed arrangements agreed upon between the Borrower, State, and ADB. Any individual payment to be reimbursed or liquidated under the SOE procedure shall not exceed the equivalent of \$100,000.

Retroactive Financing

6. Withdrawals from the Loan Account may be made for reimbursement of reasonable expenditures in connection with civil works, consulting services, and equipment, incurred under the Project before the Effective Date, but not earlier than twelve (12) months before the date of this Loan Agreement, subject to a maximum amount equivalent to 20 percent of the Loan amount.

TABLE

| <b>ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS<br/>(Bihar State Highways Project)</b> |                     |   |  |
|--|---------------------|---|--|
| <b>CATEGORY</b>  |                     |   | <b>ADB FINANCING BASIS</b>                                       |
| <b>Number</b>  | <b>Item</b>         | <b>Total Amount Allocated<br/>for ADB Financing<br/>[\$]<br/>Category</b> | <b>Percentage of ADB Financing<br/>from the<br/>Loan Account</b> |
| 1  | Works               | 367,700,000   | 93.7 percent of total expenditure<br>claimed                     |
| 2  | Equipment           | 4,000,000   | 100 percent of total expenditure<br>claimed*                     |
| 3  | Consulting Services | 13,000,000  | 100 percent of total expenditure<br>claimed*                     |
| 4  | Unallocated         | 35,300,000  |  |
|  | Total               | 420,000,000   |  |

\* Exclusive of taxes and duties levied in the territory of the Borrower

## SCHEDULE 4

### Procurement of Goods and Works, and Consulting Services

#### A. General

1. All Goods, Works and consulting services to be financed out of the proceeds of the Loan shall be subject to and governed by the Procurement Guidelines, and the Consulting Guidelines, respectively.
2. All terms used and not otherwise defined in this Loan Agreement have the meanings provided in the Procurement Guidelines and/or the Consulting Guidelines, as applicable.

#### B. Procurement for Goods and Works

3. Except as ADB may otherwise agree, Goods and Works shall only be procured on the basis of the methods of procurement set forth below:

|                                   |
|-----------------------------------|
| International Competitive Bidding |
| National Competitive Bidding      |
| Shopping                          |

The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The State may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.

4. Domestic Preference. The State may allow grant of a margin of preference in the evaluation of bids under international competitive bidding in accordance with paragraphs 2.55(a) and 2.56 of the Procurement Guidelines for domestically manufactured Goods and paragraphs 2.55(b) and 2.56 of the Procurement Guidelines for domestic Works.

5. National Competitive Bidding. The State and ADB shall ensure that national competitive bidding for the procurement of Goods and related services shall conform to the provisions for "Advertised Tender Enquiry" as prescribed in the *General Financial Rules, 2005* issued in July 2005, and elaborated in the *Manual on Policies and Procedures for the Purchase of Goods* issued in August 2006, by the Ministry of Finance of the Borrower, with the clarifications and modifications described in the Procurement Plan. Any subsequent change to the agreed clarifications and modifications shall become effective only after written approval of such change by the State and ADB.

#### C. Selection of Consulting Services

6. Quality- and Cost-Based Selection. Except as ADB may otherwise agree, the State shall apply quality- and cost-based selection for selecting and engaging consulting services as set out in the Procurement Plan.

**D. Industrial or Intellectual Property Rights**

7. (a) The State shall ensure that all Goods and Works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.

(b) The State shall ensure that all contracts for the procurement of Goods and Works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.

8. The State shall ensure that all ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the consulting services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.

**E. ADB's Review of Procurement Decisions**

9. All contracts procured under international competitive bidding procedures and contracts for consulting services shall be subject to prior review by ADB, unless otherwise agreed between the State and ADB and set forth in the Procurement Plan.

## SCHEDULE 5

### Execution of Project and Operation of Project Facilities; Financial Matters

#### Implementation Arrangements

1. The State, as the Project Executing Agency, shall be responsible for overall implementation of the Project, and shall perform, or cause to be performed, its obligations as set forth herein and in the Project Agreement through the RCD.
2. The State shall establish a Project management unit at the headquarters of RCD, headed by a chief engineer, to administer, coordinate, and monitor all Project activities. The State shall also establish five Project implementation units, each responsible for one or two Project roads. The State shall appoint full-time Project managers to head the Project implementation units, and delegate adequate technical and administrative authority to them to ensure expeditious implementation of the Project.
3. The State shall designate at least one officer in the Project management unit to supervise the implementation of the EMPs and RPs. The State shall also ensure that its construction supervision consultants act as the engineer for the purposes of the civil works contracts.
4. The Borrower and the State shall ensure that all contracts financed by ADB in connection with the Project shall include provisions specifying the right of ADB to review and examine the records and accounts of the Borrower, the State, and all contractors, suppliers, consultants, and other service providers as they relate to the Project. The Borrower and the State shall allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the Project.
5. The State shall (i) standardize bidding documents and endeavor to undertake e-procurement for select contracts; (ii) strictly monitor work progress through the newly-established supervision and monitoring wing; (iii) disclose targets, progress, and achievements to the public on its website and in the local newspapers; (iv) outsource maintenance works to the private sector; (v) facilitate deputation of accounting officers in the field offices from accountant general's office to ensure appropriate recording of financial matters; (vi) establish mobile quality control squads in all district offices and introduce third-party quality control system; (vii) set up equipment bank and simplified contractor registration rules; and (viii) implement FIDIC-based contract management.

#### Road Maintenance

6. The Borrower and the State shall ensure that adequate and timely funding is provided for maintenance of the Project roads.
7. The State shall provide adequate funds under the non-plan budget for road maintenance during implementation of the Project, and also after its completion.

Counterpart Funding

8. The Borrower shall ensure that the State provides the timely and adequate counterpart funds and facilities for the Project, including the funds needed for implementing the EMPs and RPs, and any cost overruns in respect thereof.

Institutional Strengthening

9. The State shall implement the institutional strengthening action plan as set out in Appendix 3 of the RRP utilizing the recommendations of ADB's technical assistance for Institutional Strengthening of the Bihar Road Sector during the Project implementation period.

Environment

10. The State shall ensure that:

(i) the Project is designed, constructed, operated, and maintained in accordance with the environmental laws and regulations of the Borrower and ADB's *Environment Policy* (2002);

(ii) the EMPs and the mitigation measures included therein, as specified in the IEEs, are properly implemented;

(iii) the EMPs are incorporated into the bidding documents and civil works contracts, and are updated, if necessary, in course of Project implementation with prior approval of ADB;

(iv) all environmental permits, licenses and clearances are obtained in a timely manner prior to commencement of civil works in the relevant section of the Project roads;

(v) any adverse impact on the environment that may arise from the Project implementation is promptly mitigated or minimized in accordance with the EMPs;

(vi) implementation of the EMPs, including any safety breaches, violation of environmental standards, and corrective measures taken in respect thereof are reported semi-annually to ADB; and

(vii) reports and information are provided to ADB on request to enable it to verify that the Goods, Works, and consulting services financed out of the proceeds of the Loan, have been produced in a responsible manner with a view to resource efficiency, waste minimization, and other environmental considerations.

11. The State shall report any change in the alignment of any Project road to ADB, so as to determine if additional environmental assessment study is necessary.

Resettlement

12. The State shall ensure that:

(i) the Project is implemented in accordance with the Borrower's *National Rehabilitation and Resettlement Policy 2007*, the State's *Bihar Land Acquisition Resettlement & Rehabilitation Policy 2007*, ADB's *Involuntary Resettlement Policy (1995)* and *Indigenous Peoples Policy (1998)*, and the RPs;

(ii) all affected people are given adequate opportunity to participate in resettlement planning and implementation;

(iii) the RPs are disclosed to the affected people, who are compensated and assisted prior to displacement from their houses, land and assets, before commencement of civil works in the relevant section of the Project roads;

(iv) affected people receive priority for wage employment in Project construction;

(v) additional assistance is provided for vulnerable groups;

(vi) RPs are updated, if necessary, in course of Project implementation, disclosed to the affected people, and submitted to ADB for approval and disclosure on its website;

(vii) civil works contracts under the Project include requirements to comply with the RPs;

(viii) implementation of the RPs is monitored (a) internally by the Project implementation units and reported monthly to the Project management unit who shall report the results quarterly to ADB, and (b) independently by an expert under construction supervision consultant and reported biannually directly to ADB; and

(ix) affected people have an opportunity to express grievance at appropriate levels, and that local officials are instructed to resolve disputes and implement measures promptly.

HIV/AIDS, Human Trafficking, and Child Labor

13. The State shall conduct awareness program in respect of HIV/AIDS and Human Trafficking and child labor at the Project areas for which the State may engage an agency / non-government organization. The State shall ensure that the civil works contracts under the Project incorporate provisions to the effect that the contractor is required to (i) carry out HIV/AIDS awareness programs for labor; (ii) disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (iii) follow and implement all statutory provisions on labor (including equal pay for equal work and non-employment of child labor), health, safety, welfare, sanitation, and working conditions. The State shall ensure that the civil works contract also provide for termination of the contracts by the State in case of breach of any of the said provisions by the contractors.

Reporting

14. The State shall prepare quarterly progress reports, which will cover changes, if any, to the implementation schedule; problems or difficulties encountered and remedial actions taken; anticipated problems and the proposed remedial measures; work proposed to be undertaken in the following period; summary financial accounts for the Project; and social and environmental impacts. The State shall submit the quarterly progress reports to ADB within 45 days from close of each quarter.

15. Within three (3) months of physical completion of each Project road, the State shall prepare a Project road completion report, and within three (3) months of completion of the overall Project, a Project completion report. The State shall ensure that these reports include a detailed evaluation of each Project road and the overall Project, respectively, covering design; costs; contractors' and consultants' performance; social and economic impact; economic rate of return; and other details relating to the Project as ADB may request.

Project Performance Monitoring and Evaluation

16. Within three (3) months of the date of the Loan Agreement, the State shall develop a systematic Project performance monitoring system, in a form and substance acceptable to ADB.

17. Within three (3) months of the Effective Date, the State shall establish a baseline for performance indicators, which shall be used for monitoring the implementation of each Project road, and thereafter conduct annual surveys in accordance with the Project performance monitoring system for each Project road to evaluate the scope, implementation arrangements, progress and achievements of the Project.

Project Review

18. ADB and the State shall meet regularly as necessary to discuss the progress of the Project and any changes to implementation arrangements or remedial measures required to be undertaken. ADB and the State shall also undertake a mid-term review of the Project, which will focus on issues relating to implementation arrangements, and on changes, if any, needed to achieve the objectives of the Project.