

GOVERNMENT OF RAJASTHAN

Public Works Department

Terms of Reference for Project Management Consultant

A. BACKGROUND

1. The Government of India has applied for financing from Asian Development Bank for improving priority state road network in Rajasthan state. Public Works Department (PWD), Government of Rajasthan (the Client) has initiated Rajasthan State Highway Development Program (RSHDP) which aims to improve about 20000 Kilometer of State Highways and Major District Roads (MDR) to 2-lane or intermediate lane standard.
2. As part of RSHDP, about 2200 Kilometer of SHs and MDRs have been included under ADB financial assistance, as Rajasthan State Highways Investment Program (RSHIP) to improve the efficiency and safety of road transport in the state of Rajasthan.
3. RSHIP shall be implemented through PPP Division of PWD, Government of Rajasthan which will act as the client for RSHIP. To assist PWD, GoR in implementing the road improvement works efficiently; it has decided to engage Project Management Consultant (PMC) using the proceeds of the ADB financing.
4. The project roads are to be constructed under two modalities i.e. under Annuity mode and under EPC mode. Out of 2200 Km of road sections proposed to be developed under ADB financial assistance, nearly 1000 Km have been identified under Tranche -1; wherein about 750 Km roads are under Annuity mode and the rest in EPC mode. Subsequently, roads under Tranche-2 will be identified and informed to the selected Project Management Consultant.
5. The main objective of Project Management Consultant is to support the PPP Division of Public Works Department, Government of Rajasthan to implement the Rajasthan State Highway Investment Program.

B. SCOPE OF SERVICES

6. The scope of PMC services are broadly categorized into 6 dimensions, i.e. (i) to assist the Client in monitoring the implementation progress of concession(s)/ contract(s) for upgrading of state highways which are being developed with financial assistance from ADB, in terms of physical progress, financial progress, safeguard actions, and other related aspects, (ii) preparing the progress reports for the client as required by State Government of Rajasthan, Government of India, and ADB, (iii) advising the client proactively on managing the implementation schedule and addressing potential issues, (iv) prepare the documents as required for the client to submit the subsequent periodic financing requests (PFRs) to ADB in order to timely secure further funding for the investment program, (v) develop a project performance monitoring system

(PPMS) appropriate for the PPP/EPC projects being implemented by the client and in accordance with the international best practices, and (vi) other related works as requested by the client. The project roads finalized by PWD in consultation with ADB under different Packages of Tranche-1 are shown below:

Package -1 (Under Annuity Mode)

S. No.	Road Section	SH/MDR	Length in Km
1.	Kanwas –Khanpur- Aklera	SH-74	74.80
2.	Deoli - Kanwas	SH-74 A	14.85
3.	Alot (MP) –Gangdhar- Suwansara (MP)	SH-19C	24.55
4.	Kherli - Pahari	SH-22	61.16
	Total		175.36

Package -2 (Under Annuity Mode)

S. No.	Road Section	SH/MDR	Length in Km
1.	Barmer – Sindari-Jalore	SH-16	148.0
2.	Ahore – Bali- Mundara (Sanderao-Mundara)	SH-16	30.0
	Total		178.0

Package -3 (Under Annuity Mode)

S. No.	Road Section	SH/MDR	Length in Km
1.	Peelibanga - Lukhuwali	MDR-103	34.5
2.	Sardarshahar-Loonkaransar	SH-6 A	76.5
3.	Churu - Bhaleri	SH-69	35.0
4.	Sanju-Tarnau	SH-60	16.71
5.	Roopangarh - Naraina	SH-100	35.0
6.	Nagaur – Tarnau- Deedwana-Mukundgarh	SH-8, 19, 60, 82 A, 83	196.0
	Total		393.71

Package - 4 (Under EPC Mode)

S. No.	Road Section	SH/MDR	Length in Km
1.	Ajeetgarh - Chala	SH-13	33.14
2.	Sikar - Nokha	SH-20, 20 A	190.3
3.	Singhana – Buhana-Haryana Border	SH-13 B	32.64
	Total		256.08

C. IMPLEMENTATION ARRANGEMENTS:

7. The executing agency for the investment program is the Government of Rajasthan through its PWD. The PPP Division of PWD, headed by the Additional Chief Engineer (PPP), will establish project implementation units (PIU) for contract packages of project roads in the same area.

D. DETAILED TASK

8. Task 1: Project Management Support

- (i) Review, monitor and advise on the implementation of PPP concessions/ EPC Contracts, including advising the client on the use of the bidding documents and concession/ EPC agreement, advising the independent engineer/ Authority Engineer and concessionaires/ Contractors on concession-related/ contract-related matters, supporting the client in preparation of documentation for concession/ contract administration, advising the client on any potential issues of project implementation, and coordinating within the project or third parties as necessary.
- (ii) Schedule the project implementation with milestones and critical path analysis based on international best practice, and update the schedule from time to time.
- (iii) Prepare projections of contract awards and disbursements for the project and continuously update the requirement for financing based on the change orders and contract variations agreed upon in the project
- (iv) Provide proper monitoring of the funds available, fund flows within the investment program, disbursements of funds from the loan account, projections of future financial needs, and the financial progress of each concession/ contract.
- (v) Ensure that the payment certificates of the concessionaires/contractor are processed in a timely manner, and facilitate and monitor the overall progress of requesting reimbursement by ADB through the necessary process within the State Government of Rajasthan and Government of India.
- (vi) Identify issues and actions requiring management of interfaces between different parties within the investment program and external parties, such as local governments, utility companies, Ministry of Railway, parties involved in land acquisition, implementation of resettlement plan and implementation of environmental management plan, etc. Establish an interface management matrix to identify the interfaces, parties involved, decisions required and timeline for solving the interfaces. Monitor the timely addressing of Interfaces and advise the client on pending decisions/actions.
- (vii) Prepare the monthly and quarterly reports as required for management of the project and reporting to Rajasthan PWD and ADB

9. Task 2: Financial Management Support

- (i) Assist the PPP Division in customizing the Annual Project Financial Statement (APFS) from the agreed template with ADB-MOF-CAG.
- (ii) Assist the PPP Division in preparation of the financial chapters and sections of the quarterly progress reports.
- (iii) Assist the PPP Division in the implementation of a Management Information System for project management.
- (iv) Assist in the preparation of withdrawal application for getting reimbursement from ADB.
- (v) Assist the PPP Division in updating Chart of Accounts for capturing the project expenses in recording in the current Integrated Financial Management System Software (IFMS), developed by National Informatics Center (NIC), so that it is able to undertake budgeting and other functions to be fine-tuned by allowing for expenditure to be identified (a) by donor/ source (b) by project output (c) by nature of expenditure (d) by method of withdrawal and customize it for the needs in the PPP Division and provide the necessary training and assistance during implementation.
- (vi) Assist the PPP Division to maintain and periodically update a computerized asset register which is to be regularly reconciled with physical assets.
- (vii) Recommend and implement new business procedures where required for efficient financial management, and provide training to PPP Division staff to enable them carrying out the tasks assigned under the institutional and management structure.
- (viii) Assist the Team Leader on tasks related to the Finance and Accounts of the Project

10. Task 3: Project Performance Monitoring System

- (i) Define the overall project performance monitoring indicators, monitoring and reporting process and standards to fulfill the requirements of Rajasthan PWD and ADB. ADB's Guidelines for Preparing a Design and Monitoring Framework should be followed.
- (ii) Design a project performance monitoring system, including the functions of physical progress management, financial progress management, and overall portfolio management of PPP/EPC projects of Rajasthan PWD. Special considerations should be given to the nature of concession/ contract models adopted by the Rajasthan PWD.
- (iii) Conduct consultations with Rajasthan PWD, ADB, and other related parties about the proposed project performance monitoring system.
- (iv) Propose related IT systems appropriate for implementing the project performance monitoring system.

- (v) Facilitate the procurement and installation of related IT systems, and provide training to related PWD staff and concessionaires and contractors.

11. Task 4: Safeguard Coordination and Reporting

- (i) Monitor the implementation of safeguards in accordance with ADB's Safeguard Policy Statement (2009).
- (ii) Ensure implementation of Resettlement Plans (RPs) in accordance with ADB's Safeguard Policy Statement (2009) and other related policies such as the Public Communications Policy (2011), and ensure payment of compensation to people affected by the project prior to hand-over of the site to the concessionaire/ Contractor. Prepare the due-diligence reports on resettlement implementation as needed for processing of subsequent tranches under the MFF. Provide monthly and quarterly reports to Rajasthan PWD on resettlement implementation and provide updates on the schedule and financial aspects of resettlement to the team. Monitor and provide guidance to the work of the NGOs for resettlement implementation engaged by PWD and monitor the resettlement implementation at the project sites and provide training, if required, to the local PWD staff. Act as External Monitor for social safeguard in accordance to ADB SPS and prepare semi-annual monitoring reports for ADB.
- (iii) Ensure implementation of the Environmental Management Plan (EMP) and other measures related to environmental protection in accordance with ADB's Safeguard Policy Statement (2009). Ensure that all statutory and regulatory clearances/approvals relevant to environmental safeguards are obtained and the conditions noted in the clearances are implemented. Prepare the due-diligence reports on EMP implementation as needed for processing of subsequent loans under the MFF. Provide monthly, quarterly, and annual reports on EMP implementation and provide updates on the schedule and financial aspects to the team. Ensure all environmental assessment documentation, including environmental due diligence, and monitoring reports, are properly and systematically kept as part of the subproject-specific record and available upon request. All environmental documents will be disclosed subject to ADB's Communication Policy 2011 and ADB SPS 2009. Disclose IEE reports to the public through the ADB website before the approval of the respective tranche for ADB financing. Assist in the effective implementation of grievance and redress mechanism. Monitor EMP implementation at the project sites and provide training, if required, to the local PWD staff. In case of unanticipated environmental impacts during project implementation stage, prepare and update the EMP to account for such impacts after seeking concurrence from ADB. The updating shall be carried out after due consultation with the stake holders and concerned government agencies. In case during project implementation a subproject needs to be realigned, review the environmental classification and revise accordingly, and identify whether supplementary IEE is required. If it is required, prepare the TOR for undertaking supplementary IEE and provide advice on environmental consultant selection.

12. Task 5. Periodic Financing Request

- (i) Assist the Rajasthan PWD in selecting project roads proposed for subsequent loans under the MFF, and ensure the proposed improvement and/or upgrading of project roads in accordance with project selection criteria and process as agreed with ADB.
- (ii) Assist the Rajasthan PWD in reviewing the project reports about feasibility study and preliminary design, the financial analysis, and the bidding documents to meet the requirements of State Government of Rajasthan, Government of India, and ADB.
- (iii) Prepare an economic analysis of the proposed road improvements using the highway development and management model (HDM, version 4) and/or other more appropriate models. The economic analysis should follow ADB's guidelines for the economic analysis of projects.
- (iv) Ensure that relevant safeguard planning documents are prepared to ADB standard and that they are complete, accurate, and consistent with respective assessment framework plans.
- (v) Prepare the reports and documentation needed for the Rajasthan PWD to submit the subsequent PFRs to ADB to secure funding timely for project implementation.

13. Task 6. Creation of Asset Management, I.T. System and Development of I.T. enabled Road Safety System

To facilitate monitoring and evaluation, the PMC will develop a multi- platform mobile application/tool/system to enable road incident/crash reporting by the public. The backend of this system should enable-

- a. Automatic SOS alert to rescue agencies/highway petrol/police etc. in cases of accidents.
- b. Presentation and analysis of incidents and crashes on GIS maps on PWD portal.
- c. PWD staff/designated officers to moderate and validate reported data by public.
- d. Integration with the existing accident data recording system of the Rajasthan Police.
- e. Gathering and analyzing of Road accidents data, geographical information and related data for identifying frequent accident spots to facilitate treatment of such location to minimum social and economic cost.
- f. Preparation of comprehensive, dynamic road safety countermeasures library showing accident patterns, collision types, possible causes and general countermeasures for use by road safety officials at local, panchayat and State levels.

E. Output and Reporting Requirements

Sl. No.	Report	Frequency	Due Date	No. of Copies	No. of CDs
1.	Inception Report	One Time	Within 1 month after commencement of service.	5	2
2.	Quarterly Progress Reports	Every three months	10 th of month following the reporting quarters	5	2
3.	Annual Reports	Five Times	1 months after commencement month every year	5	2
4.	Project Completion Report	One Time	Before the end of Defect Liability Period	5	2
5.	Periodic Financing Report (PFR) and related document	One Time	To be decided by the client.	3	2
6.	Road Safety Audit Manual	One Time	Within 12 months after commencement of service	5	2
7.	Manual on social and environmental safeguards	One Time	Within 12 months after commencement of service	5	2
8.	Manual for Project Implementation	One Time	Within 24 months after commencement of service	5	2
9.	Road Asset Management System (RAMS) and RAMS Manual	One Time	Within 24 months after commencement of service	One set of RAMS with 5 sets of Manual	2
10.	Management Information System (MIS) and MIS Manual	One Time	Within 24 months after completion of services	One set of MIS with 5 sets of Manual	2

- 1) **Inception Report:** The report will include the Consultant's proposals of the detailed project implementation arrangements and the planned activities for different components based on the initial assessment. The report will also include the detailed work program and approach towards the assignment.
- 2) **Quarterly Reports:** The consultants shall furnish the PWD, GoR with quarterly progress reports on implementation progress including achievements and problems to be resolved. The quarterly reports shall be factual and concise with recommendations for the subsequent quarter.
- 3) **Annual Reports:** The Consultant shall furnish to the ADB and PWD, GoR an annual report covering all activities in the last 12 months. In addition to summarizing key facts and issues presented in the 4 quarterly reports for the reporting period, the annual report should include the Consultant's views on the strengths and weaknesses of the project implementation arrangement and remedial actions to be taken if any.
- 4) **Project Completion Report:** The Consultant shall prepare a comprehensive completion report of all components of the project including civil works and consulting services. The report shall incorporate summaries of the methods of construction, the construction supervision performed, problems encountered and solutions undertaken thereon and recommendations for future projects of similar nature to be undertaken by PWD, GoR.

The Consultant shall include the self-appraisal in the report in compliance with ADB requirements for project completion report of executing agencies, including detailed data and information gathered and recorded during the project implementation and those on PPMS indicators. For this purpose, the consultant shall conduct necessary field surveys on road conditions and traffic volumes at appropriate timings during the defect liability period.

- 5) **Periodic Financing Report:** Prepare the documents as required for the client to submit the subsequent Periodic Financing Report to ADB to timely secure funding for the next tranche.
- 6) **Road Safety Audit Manual:** The Consultant shall provide PWD with step-by-step guide to conduct road safety audit during project preparation, project implementation and post-construction stages. The manual should be tailored to the actual needs of PWD based on the assessed needs by the Consultant and be used for training during the consulting services.
- 7) **Manual on social and environmental safeguards:** The consultant shall prepare a manual to provide guidance to PWD, GoR for complying with social and environmental safeguard requirements under GOI and external financing agencies such as ADB during project preparation and implementation. The manual will provide guidance on key steps to be taken for social and environmental assessment including preparation of Resettlement Plans (RP), Indigenous Peoples Plans (IPP), Environmental Impact Assessment (EIA) or Initial Environmental Examination (IEE) and Environmental Management Plan (EMP) during project preparation; pre-construction related activities including land acquisitions, resettlement, processing of clearances and permits and implementation and monitoring of RP, IPP and EMP.

- 8) **Manual for Project Implementation:** The consultant shall prepare a manual for administration, supervision and management of the project and the construction contracts to be implemented. It will serve as a guide and reference to the various officials in charge of the project management and supervision in discharging their duties in a smooth and systematic manner.
- 9) **Road Asset Management System (RAMS) and RAMS Manual:** The Consultant shall develop an appropriate RAMS suitable for road inventories of PWD with the operation manual. RAMS should be based on the findings of actual needs of PWD through discussions and trainings during the assignments. RAMS and RAMS Manual shall be prepared during the first 24 months of construction works to be used for follow-up trainings of PWD officials during the consulting services. The consultant should assist PWD officials in organizing data collection, and preparing annual report of maintenance division and budget proposals using RAMS.
- 10) **Management Information System (MIS) and MIS Manual:** The Consultant shall develop an appropriate MIS for efficient management of PWD by making key management information readily available online, including the financial and physical information for management decisions. MIS Manual shall include sufficient information for recording the accounting information in MIS in compliance with statutory requirements.

Workshops and Training Sessions:

- 1) **Seminars/Workshops:** The consultant shall conduct the semi-annual seminars/workshops on key aspects of technical capacity improvement and progress to date to PWD officials. Workshops on organization issues shall be conducted on a needs basis, inviting relevant state government officials in addition to PWD officials. Workshops on social/environmental safeguards and social inclusion shall be conducted on a needs basis.
- 2) **Training sessions:** The Consultant will provide on-the-job training to PWD officials on a day-to-day basis. Small class room style sessions shall be conducted monthly or quarterly as needed to supplement the daily trainings. The semi-annual seminars/workshops will present the weakness and strengths of PWD officials identified during these training sessions and the recommendations and suggestions from participants shall be used for improving the training methods.

F. STAFFING INPUTS

The consulting services will require the following experts on an intermittent basis during 60 months, covering 3 months before the construction, 36 months construction period and 21 months operation period.

S.No.	Position	Person-months
International Expert Positions		
Key Experts		
1.	Team Leader cum Senior Contract Management Specialist	60
2.	Transport Economist	06
	Total	66

National Expert Positions		
Key Experts		
3.	Deputy Team Leader cum Senior Highway Engineer	36
4.	Financial Management Specialist	12
5.	Road Safety Expert	36
6.	Road Asset Management Specialist	24
7.	I.T. Specialist / PPMS Specialist	24
8.	Environmental Specialist	24
9.	Resettlement Specialist	24
	Total	180
	Grand Total	246

Qualification Requirements

International Experts:

1. Team Leader cum Senior Contract Management Specialist

a) Qualification	Bachelor degree in Civil Engineering. Post graduate degree in transport engineering, contract management preferred.
b) Total Professional Experience	15years
c) Project-related Experience	At least 3 project experiences on road sector institutional development. Experience of highway projects under Annuity and EPC mode of Construction.
d) Overseas/ Country Experience	Required

2. Transport Economist

a) Qualification	Bachelor degree in economics. Postgraduate degree in economics is preferred.
b) Total Professional Experience	10years
c) Project-related Experience	8 years as a project economist, preferably on road projects.
d) Overseas/ Country Experience	Required

National Experts:

3. Deputy Team Leader cum Senior Highway Engineer

a) Qualification	Bachelor degree in Civil Engineering. Post graduate degree in transport engineering, contract management preferred.
b) Total Professional Experience	15years
c) Project-related Experience	At least 2 project experiences on road sector development under PPP and EPC mode.
d) Experience in working with international org./ agencies	Preferred

4. Financial Management Specialist

a) Qualification	Bachelor degree in finance, economics, business administration. Professional qualifications in finance, accounting or business administration preferred.
b) Total Professional Experience	10 years
c) Project-related Experience	8 years in financial management system development, accounting policies development or an accountant. Familiar with the financial rules and regulations of the Government of India/ Rajasthan.
d) Experience in working with international org./ agencies	Preferred.

5. Road Safety Expert

a) Qualification	Bachelor degree in civil engineering or relevant engineering fields. Post Graduate in Road traffic engineering preferred.
b) Total Professional Experience	10 years
c) Project-related Experience	5 years in road safety audits. Familiarity with road safety audit following iRAP specifications is a plus.
d) Experience in working with international org./ agencies	Preferred.

6. Road Asset Management Specialist

a) Qualification	Bachelor degree in Civil Engineering. Post Graduate degree in Management preferred.
b) Total Professional Experience	10 years
c) Project-related Experience	At least 7 years experiences on road asset management. At least 1 experience in developing road asset management system in India.
d) Experience in working with international org./ agencies	Preferred

7. I.T. Specialist / PPMS Specialist

a) Qualification	Bachelor degree in information technology, or masters in computer applications (MCA) or related field.
b) Total Professional Experience	5 years
c) Project-related Experience	5 years in IT related assignments.
d) Experience in working with international org./ agencies	Not required.

8. Environmental Specialist

a) Qualification	Master's degree in environmental engineering, environmental science or related field.
b) Total Professional Experience	15 years
c) Project-related Experience	10 years working on environmental safeguard planning and implementation of road and similar infrastructure projects. Proven familiarity with ADB or the World Bank requirements on environmental safeguards.
d) Experience in working with international org./ agencies	Required.

9. Resettlement Specialist

a) Qualification	Master's degree in social sciences.
b) Total Professional Experience	15 years
c) Project-related Experience	10 years of experience working on land acquisitions and resettlement planning and implementation in the road sector. Proven familiarity with ADB or the World Bank requirements on social safeguard policies. Experience in capacity building for government agencies and resettlement implementation NGOs preferred.
d) Experience in working with international org./ agencies	Required

G. COUNTERPART SERVICES AND FACILITIES

PWD shall provide all the necessary data/reports as available within PWD. PWD shall also support the consultant with the necessary counterpart officials. Office space shall be provided to the consultant. Necessary office equipment, such as computers, computer peripheral, etc. should be procured under the consulting services budget.