



**GOVERNMENT OF ODISHA  
OFFICE OF THE ENGINEER-IN-CHIEF  
RURAL WORKS: BHUBANESWAR**

No. 17060 /

Dtd. 02.09.2016 /

Chief Engineer, PMGSY, Odisha, Bhubaneswar invites Expression of Interest on behalf of Orissa State Rural Roads Agency (OSRRA) from reputed firms for appointment as Performance Audit Consultant (PAC) of PMGSY works in the state of Odisha.

**1. Main Objective of the Consultancy Services**

It is envisaged that the Consultant shall undertake audit at least 20% of PMGSY ongoing contracts in the state of Odisha in a year by deploying upto two team of experts for a period of nearly 5(five) months so as to cover the entire state. However, the Consultant shall provide the services for a minimum period of six (6) months in the year.

**2. Consultant 's Team :**

The services of the PAC are expected to provide the required management support to achieve the planned outputs by deputing upto two ( 2 ) team of experts. Particular attention will be given in the evaluation of proposals on how the consultant team mobilizes to achieve the planned outputs. Consultants are encouraged to propose a staffing plan and mobilization plan that best suits the needs of the state of Odisha.

The core team of the PAC key personnel will consist of:

- (a) Team Leader ( 1no.)
- (b) Highway Engineer cum Dy team leader (1 no. )
- (c) Contract Management cum Procurement Specialist (1 no.)
- (d) Environmental & Social Specialist ( 1 no. )
- (e) Quality control Engineer cum Quality auditor (1 no. )
- (f) Finance Expert (1 no.)

**3. Scope of Services**

- a). Audit of project planning and project preparation (at least 20 % of PMGSY ongoing contracts in the state of Odisha.

- b). Audit of procurement process (at least 20 % of PMGSY ongoing contracts in the State of Odisha.
- c). Audit of Contract Management of Works
  - ( i ) During Construction (at least 20% of PMGSY ongoing contracts in each State of Odisha.
  - ( ii ) During routine maintenance and defects liability period
- d). Audit of Social and Environment safeguards (at least 20 % of PMGSY ongoing contracts in the state of Odisha.
- e). Verification that roads are built in accordance with contract documents (at least 20 % )of PMGSY ongoing contracts in the state of Odisha.

#### **4. Schedule of Completion of Tasks of Consultant**

The implementation of the services is envisaged for a period of one year (from the date of work order). The consultant shall be deploying upto two team of experts for a period of nearly 5 (five) months for undertaking Audit and other services. However the Consultant shall provide the services for a period of six (6) months during the period of assignment.

- 5. The detailed Notice of Expression of Interest (EOI) along with Terms of Reference (TOR) will be available in the website [www.tenders.gov.in](http://www.tenders.gov.in) and [www.orissa.gov.in](http://www.orissa.gov.in) from dt. 07.09.2016 to dt.06.10.2016.
- 6. Consultants must submit staffing plan and mobilization plan that best suits the scope of services as mentioned above. Copies of experience & qualification of key personals issued by concerned authorities must be submitted.
- 7. The EOI along with required informations and documents must be delivered in hard copy to the addressee below not later than 3.00 PM of dt. 06.10.2016 in the sealed envelope marked clearly "Expression of Interest for appointment of PAC".
- 8. Firms intending to participate in bidding will have to submit EOI along with application fee of Rs. 10500/- (Non-Refundable) in the form of Bank Draft drawn from any scheduled bank in favour of " Orissa State Rural Roads Agency", payable at Bhubaneswar.
- 9. The Expression of Interest will be opened at 3.30 P.M. on dt. 06.10.2016.

10. The undersigned reserves the right to reject any or all EOI without assigning any reason there of.

Chief Engineer, PMGSY  
O/o- Engineer-in-Chief, Rural Works,  
Unit-IV, Madhusudan Nagar,  
Bhubaneswar- 751001, Odisha.  
Email ID: cepmgsy\_odisha@yahoo.com  
Tel: 0674-2392964  
Mob:- 9437959677

*The*  
*11/9/16*  
Chief Engineer, PMGSY

Memo No. 17061 Dt. 02.09.2016 /

Copy forwarded to The Director, Printing, Stationary & Publication, Govt. of Odisha, Madhupatna, Cuttack-10 for information and necessary action. He is requested to arrange for publication in the next issue of Odisha Gazette.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17062 Dt. 02.09.2016 /

Copy submitted to the Principal Secretary to Govt. of Odisha, R.D. Deptt for favour of kind information.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17063 Dt. 02.09.2016 /

Copy submitted to the Director (F& A), NRRDA, 5th floor, NBCC Tower, Bhikaji Cama Place, New-Delhi for information.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17064 Dt. 02.09.2016 /

Copy forwarded to Engineer-in-Chief (Civil), R&B, Odisha, Bhubaneswar/ Engineer-in-Chief, Water Resources / Chief Engineer, P.H.(Urban)/ N.H., Odisha, Bhubaneswar for information and wide publication.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17065 Dt. 02.09.2016 /

Copy forwarded to all Collectors for information and wide publication.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17066 Dt. 02.09.2016 /

Copy forwarded to all the SEs / EEs of R.W Organisation for information and wide publication.

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

Memo No. 17067 Dt. 02.09.2016 /

Copy to the Notice Board of this office for circulation

*The*  
*11/9/16*  
Chief Engineer (PMGSY)

# **Terms of Reference for Performance Audit Consultant**

## **PMGSY Rural Roads Project**

### **I. INTRODUCTION**

1.1 Roads are arteries of the nation which provide infrastructural development for social and economic growth. A large percentage of Indian population lives in rural areas, therefore, rural road connectivity is a key component for holistic development of the nation. It provides rural development by promoting access to tap potential by way of generating increased agricultural incomes, providing better employment opportunities and access to health and educational facilities, it is also as a result, a key ingredient in ensuring sustainable poverty reduction. Notwithstanding the efforts made, over the years, at the State and Central levels, through different Programme, many Habitations in the country are still not connected by All-weather roads. It is well known that even where connectivity has been provided, the roads constructed are of such quality (due to poor construction or maintenance) that they cannot always be categorized as All-weather roads.

1.2 With a view to redressing the situation, Government of India had launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) on 25th December, 2000 to provide all-weather access to eligible unconnected habitations.

1.3 The unit for this Programme is a Habitation and not a Revenue village or a Panchayat. A Habitation is a cluster of population, living in an area, the location of which does not change over time. Desam, Dhanis, Tolas, Majras, Hamlets etc. are commonly used terminology to describe the Habitations.

### **2. PROGRAMME OBJECTIVES**

2.1 The primary objective of the PMGSY is to provide Connectivity, by way of an All-weather Road (with necessary culverts and cross-drainage structures, which is operable throughout the year) to the eligible

unconnected Habitations in the rural areas with a population of 500 persons and above in Plain areas (2001 census). In respect of the Hill States (North-East, Sikkim, Himachal Pradesh, Jammu & Kashmir and Uttarakhand), the Desert Areas (as identified in the Desert Development Programme), the Tribal (Schedule V) areas and Selected Tribal and Backward Districts (as identified by the Ministry of Home Affairs and Planning Commission) the objective would be to connect eligible unconnected Habitations with a population of 250 persons and above (2001 census).

- 2.2 The PMGSY will permit the Upgradation (to prescribed standards) of the existing roads in those Districts where all the eligible Habitations of the designated population size have been provided all-weather road connectivity. However, it must be noted that Upgradation is not central to the Programme. In Upgradation works, priority should be given to Through Routes of the Rural Core Network, which carry more traffic .
- 2.3 Govt. of India , Ministry of Rural Development through its technical agency , National Rural Road Development agency ( NRRDA ) , is implementing the programme in a big way . The programme is being implemented with the support of the States / Union Territories and their respective state rural roads development agencies ( SRRDA) and programme implementing units ( PIUs ) . Up to March 31, 2016, across India 1,16,310 habitations have been provided All Weather Connectivity by adding 5,47,886 km road network. In addition under PMGSY II (launched in May 2013) 5,146 km have been constructed till 31<sup>st</sup> March 2016. In the state of ODISHA the achievements under PMGSY-I are 36167.81 Km and under PMGSY-II are NIL, till 31<sup>st</sup> March 2016. Presently all the 29 States are implementing PMGSY. SRRDA is designated as Orissa State Rural Road Agency(OSRRA) in the state of Odisha.
- 2.4 PMGSY guidelines emphasize upon quality centered implementation strategies and recognize quality as essence of the programme. To bring execution of the programme to the desired high quality standards , a three tier quality management mechanism has been institutionalized under the programme.

The first tier of this mechanism is in house quality control at implementation unit level. The second tier is a structured independent quality monitoring at the state level through independent State Quality Monitors ( SQMs ),in which provision of 100% inspection of works has been envisaged for product control (both quality of material and workmanship).

Under the third tier, independent National Quality Monitors ( NQMs ) are deployed by NRRDA for inspection of road works at random not only to monitor quality but also to provide guidance of senior professionals to the field functionaries.

Although the design of the programme is basically sound, there are number of areas where enhancements could be made particularly with respect to greater compliance with existing procedures.

- 2.5 The NRRDA already has a functional OMMAS (on-line monitoring management and accounting system), which contains detailed information on the core net work, projects funded under PMGSY , status of procurement , physical and financial progress , etc. Notwithstanding certain data gaps , the quality of data is fairly robust and OMMAS adds considerably to the transparency & management of PMGSY.
- 2.6 To undertake integrated post review & independent verification of results under the programme which will include performance audits on all aspects of project implementation including technical aspects under the programme, Environment and Social Monitoring Framework (ESMF), citizens monitoring and grievance redress , financial management ( FM ) audits , outcome monitoring surveys and verification of fiduciary safeguards under the programme, OSRRA proposes to hire the services of a competent and experienced consultant/Agency to work as performance audit consultants ( PAC ) for the entire PMGSY programme in the state of Odisha. The PAC will identify the extent to which actions are required to rectify the identified deficiencies in each of the aforementioned aspects and will also identify the serious issues of non compliance.

### 3. **Main Objective of the Consultancy Services**

It is envisaged that the Consultant shall undertake audit at least 20% of PMGSY ongoing contracts in the state in a year by deploying upto two team of experts for a period of nearly 5(five) months so as to cover the entire state. However, the Consultant shall provide the services for a minimum period of six (6) months in the year.

### 4. **Scope of Services**

The consultancy services detailed here shall be provided to the OSRRA. The PAC will work with OSRRA and undertake audit of at least 20 % of PMGSY ongoing contracts in the State. The random sampling of ongoing contracts would be done in consultation with OSRRA and in line with applicable statistical techniques to ensure each part of the state is covered. As a consequence of this audit the consultant is expected to establish , as to how effectively the programme is being implemented, what is the level of compliance of PMGSY procedures and other guidelines , what is the level of performance short falls , if any , and the reasons thereof. The Consultant will also suggest an action plan to address the performance short falls and also make recommendations to improve programme implementation and further strengthen the agreed procedures based on experience gained during programme implementation, the audit will include quality of engineering designs , quality of cost estimates , management of social and environmental issues, procurement, quality assurance, contract administration & management and compliance to agreed conditions , quality of programme supervision, monitoring and evaluation level of involvement of local communities, grievance redressal system and maintenance management. The scope will cover the following Tasks :

#### 4.1 **TASK-1---Audit of project planning and project preparation (at least 20 % of PMGSY ongoing contracts in the State of Odisha).**

4.1.1 Review whether the core network plans have been prepared as per agreed procedures and guidelines .

4.1.2 Review the quality of engineering designs , project cost estimates and DPRs prepared in house or through consultants. Suggest measures to improve the quality of engineering designs , project estimates and DPRs.

4.1.3 Review the quality and timeliness of inputs provided by the STAs ( State Technical Agency ) in vetting of project estimates and DPRs. Review methodology being adopted by STAs for checking of the engineering designs , cost estimates and DPRs and suggest improvements , if any , so as to achieve better quality & economy in the DPRs.

**4.2 TASK-2 ---Audit of procurement process (at least 20 % of PMGSY ongoing contracts in the State of Odisha).**

The PAC shall review the overall procurement performance under the PMGSY in the State, including the level of competition, capacity of the local construction industry , general bid prices vis- a-vis the engineers estimate, average time taken between bid invitation and award of works , compliance to agreed procurement procedures , packaging of works , quality of bid documents and staffing for procurement in the State. Based on this review the PAC shall :

4.2.1 Review whether procurement plans for works, goods and services prepared by the States reflected strategy to promote competition among bidders and in case of works, packaging of road projects provided reasonable opportunity to contractors of different capacities.

4.2.2 Review that in case of procurement of works, whether the project estimates and DPRs were duly up dated at the time of inviting bids.

4.2.3 Review whether the evaluation committee(s) kept in view the basic principles of economy, efficiency , equal opportunity, transparency and bid capacity criteria while undertaking the evaluation of bids and making recommendation.

4.2.4 Review how the complaints regarding evaluation of bids / bidders during the contract award process were handled. Also indicate the period between the announcement of results regarding eligibility and



qualification of contractors and the receipt of complaints on the same , if any.

4.2.5 Review whether the contracts procurement process and related reports are properly documented and contract registers are maintained in the prescribed formats.

4.2.6 Identify cases of mis-procurement and corrupt and fraudulent practices , if any, and the possible penal actions against the defaulters which can /should be considered by the OSRRA.

### **4.3 TASK- 3 Audit of Contract Management of Works**

#### **( A ) During Construction (at least 20% of PMGSY ongoing contracts in the State of Odisha) :**

4.3.1 Review how the variations in design and scope of work entrusted initially to the contractors occurred and dealt with.

4.3.2 Review reports of SQMs / NQMs and review whether the role of PIU , SQM and NQM was effective in control of quality of works and whether the work inspection procedures are in place and are satisfactory. Suggest improvements in the scope of works of SQMs & NQMs, if any required,after deliberations with SQMs & NQMs during the visits for audit.

4.3.3 Review whether there were any delays in releasing payments to the contractors for the work carried out as per contract.

4.3.4 Review whether the contractors discharged their duties and obligations as per provisions of the contract.

4.3.5 Examine the filing system and documentation, particularly in respect of Contract Management documents and laboratory tests results.

#### **( B ) During routine maintenance and defects liability period**

4.3.6 Review whether the maintenance funds / budgets were released timely to the PIUs.

4.3.7 Review whether calendar of inspections by the various functionaries of the PIU is in place and these functionaries adhered to the same. Review what

remedial actions were proposed by the PIU functionaries and what measures were taken by the contractors to comply with the observations of the PIU.

- 4.3.8 Review whether any penalties were levied on the contractors for any non compliance on their part in performance of their obligations towards the routine maintenance and removal of defects during the defects liability period.
- 4.3.9 Review whether the PIU is up dating the road inventory and road condition data for roads under its jurisdiction.
- 4.3.10 Review a sample of roads ( two contracts during the year in the State) in consultation with OSRRA selected on random basis to determine the quality of maintenance, during the first five year period.

**4.4 TASK-4 Audit of Social and Environment safeguards (at least 20 % of PMGSY ongoing contracts in the State of Odisha ) :**

- 4.4.1 Review whether the works undertaken complied with the prescribed social and environment safeguards framework.
- 4.4.2 Review whether communities were involved in finalization of the alignment and awareness raising programmes were conducted with the citizen groups.
- 4.4.3 Review how the grievances of the citizens and communities , if any , were addressed.
- 4.4.4 Undertake checking of the provisions of ESMF through field visits on sample basis of at least five projects selected on random basis in consultation with OSRRA. Special attention be given, whether work sites, contractor camps complied with ESF laws, regulations and guidelines.

**4.5 TASK-5 Verification that roads are built in accordance with contract documents (at least 20 % of PMGSY ongoing contracts in the State of Odisha ) :**

The technical audits will focus on the examination of the quality of works, to verify whether the road works comply with the technical specifications

and standards described in the bidding documents. The consultant will carry out the following tasks :

(A) Design review of roads improvement projects :

Review designs, including the geometry , pavement structure , road furniture and drainage.

(B) Assess the quality of works under execution / completed and their conformance with the specifications indicated in the bidding documents and works contracts , and whether the contract terms were respected by the parties.

The works quality should be determined through visual inspections / examination, and reports of SQMs and NQMs.

(C) Verify the timing of works execution of completed and ongoing works, in relation to the time period of the completion specified in the Contract / any sanctioned extension of time.

(D) Analyze if necessary , cost over runs , by type of work, amount of Contract.

## **5. Methodology of Audit**

5.1 The Consultant shall propose to OSRRA, the method to be adopted for sampling of contracts / samples for audit to ensure that the sample selected is consistent and without any bias.

5.2 The consultant will have consultations and discussions with various stakeholders while undertaking the review and audit. OSRRA would facilitate this.

5.3 The consultant shall prepare a comprehensive check list of questions / queries for each of the task indicated in para 4 above with a view to capturing a thorough review and audit of the overall implementation of the PMGSY framework. The check list shall be discussed and finalized in consultation with OSRRA.

5.4 The findings of the audit will be discussed with OSRRA and subsequently shared with NRRDA. The PAC consultant will assist in preparation of an agreed action plan based on findings of the audit and discussions for further implementation under the programme.

## **6. Reporting Requirements**

The Consultant will submit the following Reports:

**6.1 Inception Report** : Within one month of the commencement of services , suggesting

(ii) the method proposed for sampling of the contracts to be audited

(ii) the format of the audit report

(iii) how the audit will be organized in both PIUs & OSRRA head quarters.

**6.2 Draft Audit Report** :

Covering all the tasks as per para 4 above end of 5<sup>th</sup> month.

**6.3 Final Audit Report** : Reports for the State, finalized after incorporation of the comments finalized during the discussions with MORD , OSRRA and NRRDA end of 6<sup>th</sup> month.

**6.4 Action Plan** : Based on the discussions with OSRRA .

**6.5 Consultancy Completion report** : A completion report at the end of the assignment describing

(i) the overall achievements of the services

(ii) lessons learnt including problems encountered during performance of the services and mechanism of resolving the problems and

(iii) suggestions for modification in the scope of services for future audits.

**6.6 Quantity** : Two hard copies along with soft copy of each report

**6.7 Language** : English

7. **Duration of Services** : One year (from the date of work order).

8. **Consultant 's Team** :

The services of the PAC are expected to provide the required management support to achieve the planned outputs by deputing upto two ( 2 ) team of experts. Particular attention will be given in the evaluation of proposals on how the consultant team mobilizes to achieve the planned outputs. Consultants are encouraged to propose a staffing plan and mobilization plan that best suits the needs of the specific state.

9 . The core team of the PAC key personnel will consist of:

- (a) Team Leader -- Intermittent input
- (b) Highway Engineer cum Dy team leader (1 no. ) --Intermittent input
- (c) Contract Management cum Procurement Specialist (1 no.) -- Intermittent input
- (d) Environmental & Social Specialist ( 1 no. )-- Intermittent input
- (e) Quality control Engineer cum Quality auditor (1 no. ) -- Intermittent Input
- (f) Finance Expert (1 no.) – Intermittent Input.

9.1 The experience and qualifications of the key personnel would be as under:

Sl. no.	Position	Educational Qualification	Professional Experience	Specific Experience
1	Team Leader	Post Graduate Degree / Diploma in Management or Economics from a institute of repute.	Nearly 15 years of experience in audit of large establishments / projects related to civil construction works.	He should have worked at least 5 years in roads / highways sector. Should have overall knowledge & experience of audits of civil construction works.
2	Highway Engineer cum Dy team leader	Graduate in Civil Engineering from a institute of repute.	Overall 15 years experience in road sector	Minimum of 10 years experience in planning , design , construction and maintenance of roads , out of which at

				least 5 years in rural roads. He should be familiar with cost effective design standards, quality assurance procedures and maintenance management system.
3	Contract Management cum Procurement Specialist	Graduate in Civil Engineering from a institute of repute	Overall 12 years experience in Civil Works Contracts.	At least 7 years of experience in procurement and contract management of road projects. He should have worked at least 3 years as Quantity surveyor / contract management expert on roads / highway projects.
4	Environmental & Social Specialist	Master degree or equivalent in environmental science/engineering/ PhD in Sociology or equivalent qualification.	Overall 10 years experience in road sector/ transportation/ infrastructure projects in related assignments.	He should have 5 years experience on environmental impact assessment of related development projects. The candidate must have the experience of preparing environmental management plans and supervising & monitoring implementation of the plans. Experience in supervising & monitoring the implementation of the resettlement action plans is essential.
5	Quality control Engineer cum Quality auditor	Graduate in Civil Engineering from a institute of repute	Overall 10 years experience in road sector.	He should have worked at least 5 years as Quality control / Material Engineer on Roads/ Highways projects. He should have experience and overall knowledge of maintenance policies, annual maintenance contracts. Road inventory and best engineering practices for maintenance of rural roads.
6	Finance Expert	Post Graduate in Commerce or Economics, from an institute of repute	Overall 5 years experience in Accounting / Bookkeeping & Financial Management	He should have worked at least 2 years in keeping and managing accounts in an organisation.

**9.2** The function of team leadership will be dealt with by the Team Leader. The Highway Engineer cum Dy team leader can also be designated as team leader with prior approval of the NRRDA. Mobilization & demobilization of the intermittent key personnel shall only be done with the prior written approval of the Client (OSRRA) .

## **10. Inputs by the OSRRA and PIUs**

10.1 The OSRRA will provide access to the required information and other assistance as required by the consultant, to effectively undertake this assignment. In addition to this OSRRA, PIUs will also provide access to the required information and other assistance as required to effectively undertake this assignment

10.2 The calendar of visits and inspection of records / works by the Consultant's team will be decided in consultation with OSRRA.

## **11. Schedule of Completion of Tasks of Consultant**

The implementation of the services is envisaged for a period of one year (from the date of work order). The consultant shall be deploying upto two team of experts for a period of nearly 5 (five ) months for undertaking Audit and other services as per para 4 above. However the Consultant shall provide the services for a period of six (6) months during the period of assignment.