

National eMarg

electronic Maintenance of Rural Roads under PMGSY

Overview and National rollout

Overview

PMGSY launched in year 2000 for providing connectivity to rural habitations.

Need for an effective maintenance monitoring to preserve constructed asset.

eMARG : Enterprise eGovernance solution for maintenance monitoring of PMGSY by NIC.

eMARG Demonstration

- National Workshop on eMARG in Bhopal, RRM at Chennai & Patna

Provision of maintenance

- Post construction defect liability period (Pre-5)
- Five-year performance guarantee (Post-5)

The maintenance payment is inspection-based at predefined rates

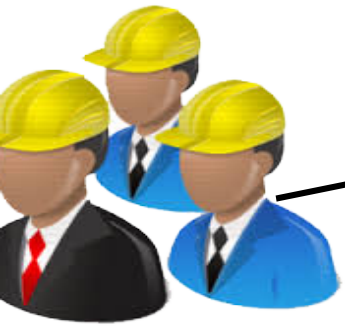
Stakeholders



SRRDA/PIU



PFMS/ Bank

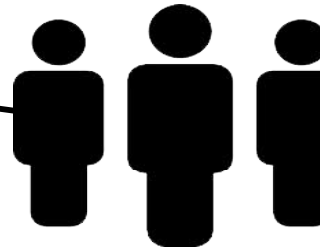


Contractor



NRIDA, MoRD

NIC



Citizen

Functional Features

- Roles-based scope (District, State, National, Administrator)
- Roles-based Services (Inspection Services for AM's, Approvals etc...)
- Individual User registration, Packaging of roads etc.
- System generated bills based on NIT maintenance rates.
- Facility to contractors for online submission of bills & tracking
- Routine / Renewal Inspections through Mobile App
- Index-based Performance Evaluation.

Functional Features

Centralized entry of Income Tax, GST, maintenance rates .

Vouchers generated by the system with deductions towards Taxes, Royalty etc.

Electronic scroll (.pdf & .XML) digitally signed by Approving Authority (GM)

Direct Digital payment to the Bank account of Contractor through PFMS

Termination, Balance Work Package creation and Transfer of Road

Dash Board, Query, Reports, Exceptional Reports, Search, Support Services etc.

SMS/Email alerts at every stage to Concerned (GM, Contractor etc.)

Integration with OMMAS

Role-based Services

- Data Entry (DEO) : Contractor registration etc.
- Contractors : Routine Bill Submission / tracking
- Coordinator (State-level) : NIT-wise maintenance rates & support services
- Coordinator (National-level) : Income, GST etc. applicable for all
- JE/AE/ AM : Verification & updation of packages/ roads
- JE/ AE/ AM/ GM : Inspection (Routine & Performance)
- Accounts (Account Officer) : Voucher & Scroll Generation etc.
- Approvals/ Freezing (GM) : Digital Signing scroll, freezing, change of allocation
- Administrator (state-level) : Managing the users, access, roles, de-activation etc

Main Menu

- Dashboard
- GIS
- Data Maintenance
- Query / Report
- Master Database
- My Settings
- Logout

NEW What's New
[Important Instructions](#)
[Acrobat Reader Download](#)

Related Links
[Pradhan Mantri Gram Sadak Yojana \(PMGSY\)](#)
[Madhya Pradesh Rural Road Development Authority](#)
[Ministry of Rural Development Govt](#)
[Madhya Pradesh Geo-Portal](#)

Dash Board

Pre-5 Maintenance

Post-5 Maintenance

Post-5 Maintenance Packages & Roads

Eligible Roads
8823

Packages
2336

Packaged Roads
7922

Bill Details

6 Months 9 Months 1 Year **1+ Year**

Submitted
16495

Returned
1034

Pending
5721

Approved
400

Pending at Bank
0

Paid
9340

Submission Pending
3181

Expected Future Bills (Part-II)

3 Months 6 Months 9 Months **1 Year**

Next 1 Year
17838

Main Menu

Dashboard

GIS

Data Maintenance

Dash Board

Pre-5 Maintenance

Post-5 Maintenance

Paid Bills

(Total 9340 bills of Rs. 32200.00 lakh)

Sr No	District Name	Total Bills	Paid Amount (in Lakh)
1	ALIRAJPUR	346	1052.67
2	ANUPPUR	179	1051.11
3	ASHOK NAGAR	4	0.48
4	BALAGHAT	349	1046.78
5	BARWANI	299	584.21
6	BETUL	309	880.50
7	BHIND	29	328.17
8	BHOPAL	152	301.69
9	BURHANPUR	92	264.47
10	CHHATARPUR	8	313.54
11	CHHINDWARA	274	1035.27
12	DAMOH	89	183.24

Next
1 Year
17838

Inspection Details of Roads Under Pre-5 Maintenance

[Save as PDF](#)

Inspection No. : IR-MW225
District : SEHORE
Package : MP3511Bal
Road Length(km) : 31.86
Inspecting Officer : Vineet Kumar Shrivastava (AM)
Overall Grading : Satisfactory

Activities

- 1) Conditions of road in respect of Pot holes/patch repair
- 2) Conditions of road in respect of Rain cuts/shoulder repair
- 3) Conditions of Jungle clearance on shoulders and side slopes
- 4) Conditions of road in respect of C. C. Pavement Maintenance
- 5) Conditions of road in respect of C. D. Structure Maintenance

Overall Grading

Overall Remark : NA

Constraints : NA



Zoom

Inspection Image - Google Chrome

<https://gismp.nic.in/eMarg/search/ShowInspectionImage.jsp?id=0&imgno=1>



Inspection Details of Roads Under Pre-5 Maintenance

[Save as PDF](#)

Inspection No. : IR-MW6251
District : SEHORE
Package : MP3586ADB
Road Length(km) : 10.9
Inspecting Officer : A K Mishra (CGM)
Overall Grading : Unsatisfactory

Activities

- 1) Conditions of road in respect of Pot holes/patch repair
- 2) Conditions of road in respect of Rain cuts/shoulder repair
- 3) Conditions of Jungle clearance on shoulders and side slopes
- 4) Conditions of road in respect of C. C. Pavement Maintenance
- 5) Conditions of road in respect of C. D. Structure Maintenance

Overall Grading

Overall Remark : seal coat wam out at many

Constraints : NA



Zoom

Inspection Image - Google Chrome

<https://gimp.nic.in/eMarg/search/ShowInspectionImage.jsp?id=0&imgno=1>



Inspection Details of Roads Under Pre-5 Maintenance

[Save as PDF](#)

Inspection No. : IR-MW1858	Stage : Pre-5 Maintenance
District : SEHORE	Block : NASRULLAGANJ
Package : MP3511Bal	Road Name : (T006) Nasrullaganj Khategaon road
Road Length(km) : 31.86	Road Chainage : 21.0 to: 24.0
Inspecting Officer : Y.k.saxena (GM)	Inspection Date : 16-02-2015
Overall Grading : Unsatisfactory	

Activities	Grade Provided
1) Conditions of road in respect of Pot holes/patch repair	Unsatisfactory
2) Conditions of road in respect of Rain cuts/shoulder repair	Unsatisfactory
3) Conditions of Jungle clearance on shoulders and side slopes	Unsatisfactory
4) Conditions of road in respect of C. C. Pavement Maintenance	Unsatisfactory
5) Conditions of road in respect of C. D. Structure Maintenance	Unsatisfactory
Overall Grading	Unsatisfactory
Overall Remark	NA
Constraints	NA



Zoom



Zoom

* SRI: Satisfaction Requires Improvement.

Inspection Details of Roads Under Pre-5 Maintenance

[Save as PDF](#)

Inspection No. : IR-MW1858
District : SEHORE

Stage : Pre-5 Maintenance
Block : NASRULLAGANJ

Name : (T006) Nasrullaganj Khategaon road

Chainage : 21.0 to: 24.0

Inspection Date : 16-02-2015

Grade Provided

Unsatisfactory
 Unsatisfactory
 Unsatisfactory
 Unsatisfactory
 Unsatisfactory

Unsatisfactory



Zoom

* SRI: Satisfaction Requires Improvement.

Image - Google Chrome

gismp.nic.in/eMarg/search/ShowInspectionImage.jsp?id=0&imgno=2



Pre-5 Maintenance Work Payment Inspection

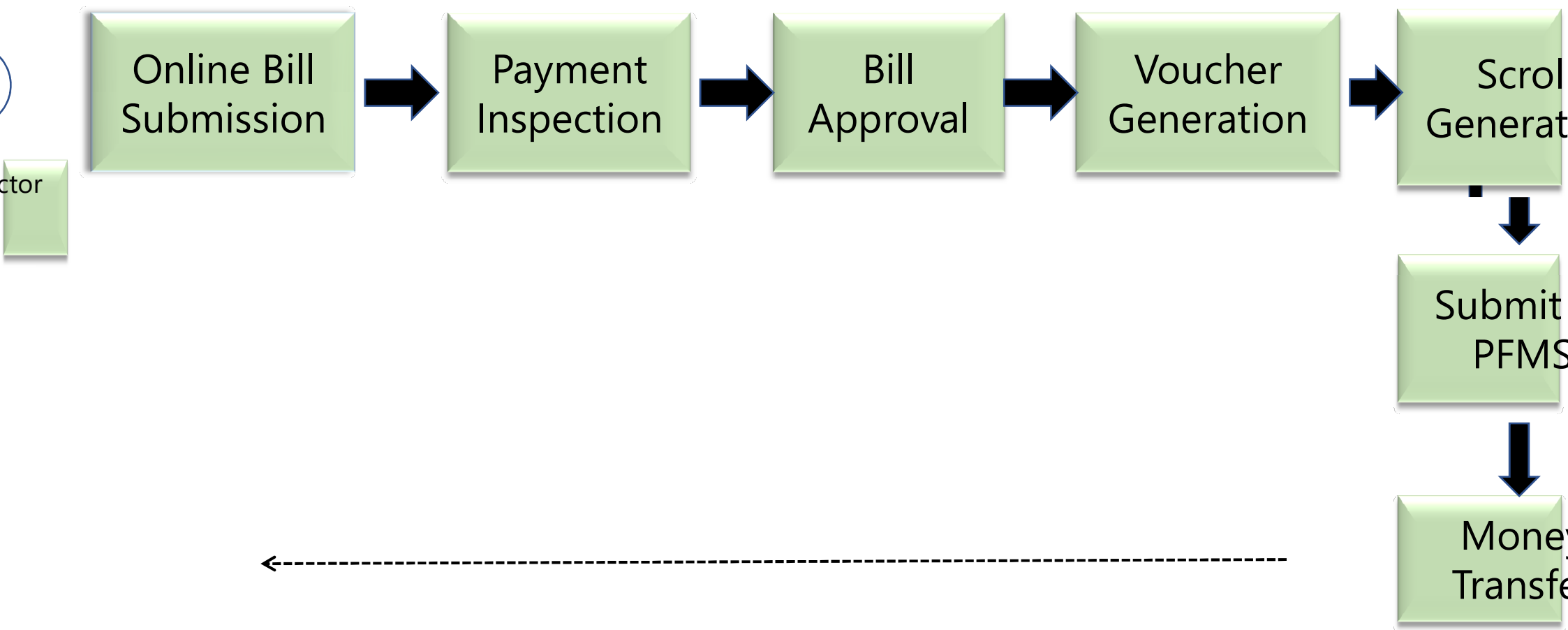
Inspection Code : IP-MWIP-MW240 **Inspection Date** : 11-09-2014
District : RAJGARH **Block** : BIAORA
Package No : ADBMP3057 **Road** : (L074) Bagwaj to Kankaria
Officer Name : Vandan Kumar Dhagat **Officer Designation** : GM

S. No.	Name of Item/Activity	Performance Index	Marks Obtained
1	Restoration of rain cuts and dressing of berms	10	9.0
2	Marking up of shoulders	20	10.0
3	Maintenance of Bituminous surface road and/or gravel road and/or WBM road including filling pot holes and patch repairs etc.	50	47.0
4	Maintenance of drains	3	3.0
5	Maintenance of culverts and cause ways, Maintenance of guard rails etc.	5	4.0
6	Maintenance of road signs	2	2.0
7	Maintenance of 200m and Killo Meter stones	2	2.0
8	Cutting of branches of trees, shurbs and trimming of grass and weeds etc.	3	2.0
9	White washing parapets of C.D. Works, guard stones & Re-Fixing displaced guard stones.	2	2.0
10	Repair of old joints sealant (CC joints) as in	3	2.0
Total		100	91.0

Overall Remark : Satisfactory

[Go Back](#)

Digital Payment through PFMS



Transaction Summary in M.P.



Parameter	Pre-5 Maintenance	Post-5 Maintenance	Total
Number of Packages	3023	2836	5859
Number of Roads	7230	10154	17384
Length (in K.M.)	26051	41518	67569
Inspection	243153	177224	420377
Payment	188.24 Cr	1051.69 Cr	1239.93 Cr

Implementation Plan (Phase-I)



- Phase-I will cover AP, Gujarat, Haryana, Karnataka, Punjab, Rajasthan, TN, Telangana, UP, UK
- OMMAS data for construction packages received & processed. No need of fresh data entry.
- eMARG will be launched around 1st week of Feb'2019 for user & contractor registration, data verification/ updation & NIT module
- Training of Administrator (IT-NO/ Task Manager) & 2 SRRDA Technical Officers (EE/GM/SE) of each state Hq.

6 month roll-out plan

Routine Maintenance

Months	1	2	3	4	5	6
10 Pilot States	Training and Registration of Department and Contractors in eMarg	Data Verification and Updating Module	Registration of Contractors on PFMS	Training and Launch of Bill, Inspection and Payment Module for Routine Maintenance		
Remaining States			Training, Registration, Verification and PFMS Setup		Bill, Inspection and Payment Module	

Data readiness at SRRDA

- Completion date of construction phase.
- Completed length of road (up to cm accuracy)
- BT & CC length
- Carriageway (3.0, 3.5, 3.75 & 5.5) and top width of the road (6.0, 7.5) in meters
- Traffic density (T1 to T9/ A, B, C,D)
- NIT No. & NIT date (for maintenance rates, Security Deposit / Performance Security etc..)

Dependencies at SRRDA

- Performance based maintenance policy
 - Standardizing inspection formats for Routine & Performance
 - Payment criteria for bill processing (< 70 , > 80 ...)
- State-level Scheme registration with PFMS

Thank You

Vivek Chitale

Senior Technical Director & ASIO
Head GIS & Digital Signature Division

NIC M.P. Bhopal

vc@nic.in