


**No. M-11011/02/2016-RE-III**  
**Government of India**  
**Ministry of Rural Development**  
**Department of Rural Development**  
**MGNREGA Division**  
**GeoMGNREGA** 

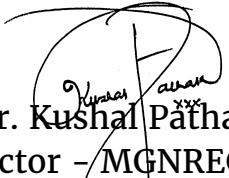
Krishi Bhawan, New Delhi  
Dated: 21<sup>st</sup> September, 2016

**Sub: Minutes on 'Smoke Testing' for GeoMGNREGA**

This is in reference to the meeting held on 16th September, 2016, under the chairmanship of JS(RE) to discuss the functional issues and state requirements for successful deployment of GeoMGNREGA Wave-I (GeoHOME) and Wave-II on 16<sup>th</sup> November, 2016.

2. A copy of the minutes of the meeting is enclosed for kind information and necessary action.

Yours faithfully,

  
(Dr. Kushal Pathak)  
Director - MGNREGA

Encl: As above

Copy to:

1. Principal Secretaries/ Secretaries of all States / UTs, Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)
2. Dr. Y.V.N. Krishna Murthy, Director, National Remote Sensing Centre, Hyderabad
3. Sh. Prashant Mittal, Senior Technical Director, National Informatics Centre, New Delhi
4. Dr Vasala Madhava Rao, Professor & Head, C-GARD, National Institute of Rural Development & Panchayati Raj, Hyderabad

## Minutes of meeting held on 16th September, 2016 regarding **'Smoke Testing' for GeoMGNREGA**

A meeting was held on 16th September, 2016, under the chairmanship of JS (MGNREGA) where 'Smoke Testing' was done to test the crucial functionalities of GeoMGNREGA application and Web interface. The List of division and organization who participated in the smoke testing is attached as Annexure-1. Following States did not participate:

1. Andhra Pradesh
2. Meghalaya
3. Manipur
4. Jammu & Kashmir
5. Goa
6. Andaman and Nicobar
7. Pondicherry

2. The Deputy Directory, National Remote Sensing Centre (NRSC) made a presentation demonstrating the GeoMGNREGA web application and elaborating geotagging status of Wave-I districts.

3. It was informed by Joint Secretary (MGNREGA) that based on the performance under GeoMGNREGA, Ministry has proposed awards for States, District, Block and Gram Panchayat during the MGNREGA Sammelan Day.

4. It was informed that MoRD will institutionalize appropriate governance mechanism for effective monitoring and handholding support. Monthly scheduled video conferencing will be initiated and service support desk will be set-up at NIRD & PR.

5. The review of the training status was taken. It was directed that the states should ensure that all the field functionaries associated with Wave-I and Wave-II districts should be trained as per the structured module designed by MoRD within the stipulated time frame on or before 31st October, 2016. NIRD & PR will provide necessary technical and financial support.

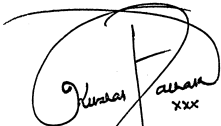
6. As per the information received on 16 September, 2016 by the state of Mizoram, Bihar, Haryana and Rajasthan has constituted the 'State Level Working Group'. This working group is very critical in the implementation of



Wave-I and Wave-II, and its report on status of preparedness of GeoLive of Wave-I should reach Mord on or before 24th October, 2016.

7. Full day smoke testing was done by State Government of GeoMGNREGA solution. NRSC & NIC had setup real time test environment for the Smoke Testing. Barring few modules (as highlighted in the detailed technical sheet), remaining modules were passed by State Government. All the bugs, essential and mandatory features which were brought out by States were discussed and agreed to be incorporated before the launch of Wave-II by NRSC and NIC. It was also decided that the final Smoke Testing for wave-I will again be done after incorporation of the features and removal of bugs and communication by NRSC, but before the launch of Wave-I on 1st November 2016.

8. Feature suggestions which were circulated separately as part of agenda could not be considered due to paucity of time. They will be taken up upon successful launch of GeoLive for Wave-I.



Dr. Kushal Pathak  
(Director MGNREGA)  
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**LIST OF PARTICIPANTS OF SMOKE TESTING****Venue:** Unnati Hall, Krishi Bhawan, New Delhi - 110001**Date of Meeting:** Friday, the 16th September, 2016**Timing of Meeting:** 09:30 AM till 05:00 PM

1. Smt Aparajita Sarangi, JS(RE)
2. Shri V Bhanumurthy Deputy, Director, RSAA
3. Dr. Kushal Pathak, Director SAGY & MGNREGA
4. Dr Girish S Pujar Scientist SF, RDWMD, NRSC
5. Shri Arulraj Murugvel Manager, BWS, NRSC
6. Shri A Lesslie, Scientist SE, ASD & CIG, NRSC/ISRO
7. Shri T. Phanindra Kumar, C-GARD, NIRD
8. Shri Selveswaran M., PSA, NIC, DORD
9. Shri Atul K Singh, SA, NIC, DORD
10. Shri Ranjit Jadhav, Project Officer, MORD
11. Shri Anil Singh, Project Executive, MORD
12. Shri Mukesh Kumar, Project Executive, MORD
13. Shri Vivek Anand, Project Executive, MORD
14. Ms. Shruti Singh, Fellow, MORD
15. Shri Amit Jain, Project Executive, GeoMGNREGA Operations
16. Ms. Ankita Sharma, Project Executive, GeoMGNREGA Coordination

**Participated Members (States):-**

<b>S. NO.</b>	<b>State</b>	<b>Participant Name (Shri /Ms)</b>	<b>Designation</b>
1	West Bengal	Rajashri Roy	SGNO
2	West Bengal	Arunabha Das	DGNO
3	Kerala	Abdul Kalam Azad	SGNO
4	Kerala	Sajith G S	DGNO
5	Maharashtra	Abhay Tijare	SGNO
6	Maharashtra	Darshan Ambilduke	MSE
7	Jharkhand	Pankaj Kumar Rana	SGNO

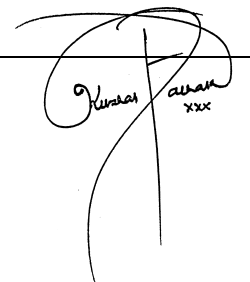
8	Jharkhand	Subash Prabakaran	DGNO
9	Chhattisgarh	Sami Mazhar Khan	SGNO
10	Sikkim	Tulsi Nepal	SGNO
11	Mizoram	Paul L. Khuma	SGNO
12	Mizoram	P. Vanlalhruai	State MIS
13	Odisha	SK Samal	SGNO
14	Punjab	Mandeep Singh	DGNO
15	Arunachal Pradesh	Sanjib Das	SGNO
16	Arunachal Pradesh	T T Bathi	DGNO
17	Arunachal Pradesh	Sang Droma	EO(RE)
18	Bihar	Kumar Sidharth	DGNO
19	Bihar	ALOK Kumar	GMRRP
20	Tripura	Amitabha Datta	SGNO
21	Tripura	Pyush K Deb Barrua	DGNO
22	Karnataka	Pooja A. S.	State GIS Coordinator
23	Karnataka	Madhu Sudhan	District MIS Coordinator
24	Telangana	B. Saidulu	SGNO
25	Telangana	D. Hema Nagaraju	DGNO
26	Haryana	Sundeep Wahi	SGNO
27	Haryana	Anil Khokhar	DGNO
28	Haryana	Dilawar Singh	GAS
29	Himachal Pradesh	Manoj Kumar	DGNO

30	Himachal Pradesh	Vivek Dhiman	DGNO
31	Assam	Samiran Dev Pathak	SGNO
32	Assam	Sahab Uddin	DGNO
33	Uttar Pradesh	Dr. Saurabh Rajput	BDO, GAS
34	Uttar Pradesh	Niraja Gupta	DGNO
35	Rajasthan	Indrajeet Nimesh	DGNO
36	Rajasthan	Shashikant Munjal	State MIS Manager
37	Rajasthan	Shiv Narayan	MSE
38	Tamil Nadu	A Kuttalingam	SGNO
39	Tamil Nadu	S. Thanikachalam	DGNO
40	Tamil Nadu	S Silvam	GAS
41	Gujarat	Hariom Nirala	SGNO
42	Gujarat	S J Joshi	DGNO
43	Uttarakhand	Lokesh Bahuguna	SGNO
44	Uttarakhand	Manvinder Kaur	GAS
45	Nagaland	Noklen Jamir	SNO & SGNO
46	Nagaland	G. Thong	Asst. State MIS Nodal Officer
47	Madhya Pradesh	Ovais Ahmed	SGNO
48	Madhya Pradesh	Ankur Sharma	GAS

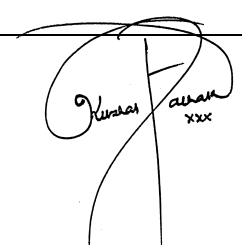
# SMOKE TESTING TECHNICAL SHEET

GeoMGNREGA 

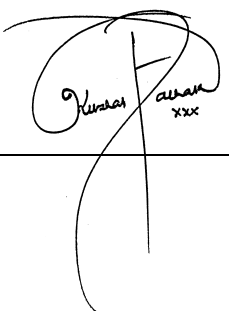
SN	Event		Groups	Discussion and Action Points
1	Smoke Testing Session 1			
1.1	Asset Completion & Asset ID Generation in NREGASoft- NIC	<ol style="list-style-type: none"> <li>1. Understanding of Primary and Secondary Asset</li> <li>2. Role clarity of GAS, Official completing the work and Data Entry Operator</li> <li>3. Creation of One Work to One Asset</li> <li>4. Creation of One Work to Multiple Assets</li> <li>5. Entry of Asset Id into Fixed Asset Register(FAR)</li> </ol>	STG-1(Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Mizoram, Tamil Nadu, Tripura, Uttar Pradesh)	<ol style="list-style-type: none"> <li>1. Bihar informed that the asset names of the majority of the works have are not in conformity to GeoMGNREGA and thus should all be reset for correction at the level of NREGASoft. This was considered as essential requirement by MoRD. <b>Action: NRSC and NIC</b>, NRSC will remove all the Bihar asset data where geotagging have not been done and provide the list of geotagged assets to NIC. NIC will delete the asset details other than geotagged assets from NREGASoft for Bihar, so the works are available in "Create Asset ID for Completed Works" option. Bihar should complete Asset ID creation on or before 1st Oct 2016.</li> <li>2. Successful.</li> <li>3. Successful</li> <li>4. This was considered as essential requirement by MoRD. <b>Action: NIC (Before: 10 Oct, 2016)</b>, As agreed separate form will be added to create multiple asset from one work in case of Individual and IHHL work category only and will not be pushed to bhuvan until all mentioned assets are created from NREGASoft.</li> <li>5. Successful</li> </ol>



1.2	Web Services for Location master - NRSC	1. Running of Location Master Web Service & successful capture at NRSC		Successful. However, the cron cycle was required to be shorter to ensure early updation of data. The states requested it to be updated in regular frequency. This was considered as essential requirement by MoRD. <b>Action: NRSC,</b> As agreed the CRON will be scheduled to pull the NREGASoft location master every Sunday at 8 PM.
1.3	Web Services for Asset Master and Asset details- NRSC	<ol style="list-style-type: none"> <li>1. Sending of packets more than 1000 records by NIC</li> <li>2. Successful testing of Data at Bhuvan</li> <li>3. Reconciliation of complete data handshake</li> </ol>		<p>1, 2 &amp; 3. Not Successful. The two way handshaking between web services is not happening correctly. As per NRSC 21,81,027 records were received out of which only 4,31,071 records have manually been received and therefore, the web services at their end is working fine. On the other hand, NIC Stated that "The first time the request comes with requestid =NEWREQUEST gave 1000 records with available records count to download. But next request again calls with NEW REQUEST or subsequent request not coming while it is expected to call with request id of first request till the available count become zero", therefore NIC was of the view that as per SOP NRSC has to send the acknowledge(through callback service) which is not coming in case of asset detail. The asset master web service should be called completely for a State then only asset detail web service is to be called for that State.The issue could not be resolved during the smoke testing. This was considered as essential requirement by MoRD.</p> <p><b>Action:</b> As successful establishment of data</p>

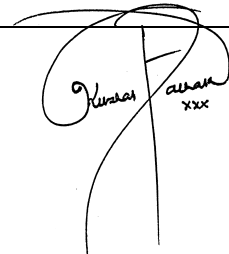

  
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				connection between NREGASoft and Bhuvan is mission critical therefore it was decided that this issue should be resolved urgently by direct communication between NIC and NRSC team. NRSC should share all the relevant details of point of failures for NIC to resolve and vice a versa.
1.4	Bhuvan Registration Process-NRSC	<ol style="list-style-type: none"> <li>1. Successful Registration of GAS and DGNO</li> <li>2. Successful testing of permissions and moderations at the level of SGNO</li> </ol>	STG-2(Andaman & Nicobar Island, Arunachal Pradesh, Assam, Kerala, Manipur, Meghalaya)	<ol style="list-style-type: none"> <li>1. Successful.</li> <li>2. Successful.</li> </ol>
1.5	GeoMGNREGA Mobile App Registration process-NRSC	<ol style="list-style-type: none"> <li>1. Successful registration of MSE</li> <li>2. Successful re-registration of MSE through another mobile phone</li> <li>3. Successful restriction of permissions till approval of account and display of message about validation</li> </ol>		<ol style="list-style-type: none"> <li>1. Successful. It was found out that registration for wave-II is not allowed at bhuvan. This was considered as essential requirement by MoRD. <b>Action: NRSC</b>, As agreed (i) the MSE/GAS/DGNO registration for Wave-II districts should be allowed. (ii) The mobile number of MSE should be visible as a column to GAS at the moderation panel.</li> <li>2. Successful.</li> <li>3. Restriction not present: It was pointed out that user without authorization are also able to download the asset details in the mobile application and that the very purpose of registration is to ensure access based on permissions. However NRSC informed that this requirement was not told to them earlier. <b>Action: NRSC</b>: It was agreed that same would be done so that only an authorized user can download the asset information and only after validation of the account. States requested that one MSE should be</li> </ol>

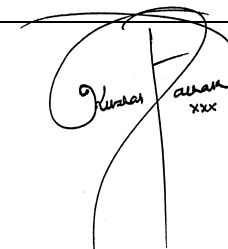
				<p>allowed to work from more than Gram Panchayat under the same block without having to register again through mobile application. Further that incase of change in the block the re-registration should be mandatory for MSE.</p> <p>This was accepted and agreed upon. This was treated as a mandatory requirement by MoRD. Action NRSC, to ensure that appropriate permission are enabled.</p>
2	Smoke Testing Session 2			
2.1	Asset Acceptance Module from App to Portal -NRSC	<ol style="list-style-type: none"> <li>1. Successful selection of Asset</li> <li>2. Successful capture of GPS(10 meters accuracy)</li> <li>3. Successful capture of 2 pictures of Asset</li> <li>4. Save an Asset</li> <li>5. Send an Asset</li> <li>6. Testing of Send Later, Sent Failed and View Sent List</li> <li>7. Testing: Asset once uploaded should not be available with the same MSE mobile app.</li> <li>8. Testing: The mobile application should not allow uploading of Geotag information once uploaded earlier.</li> </ol>	STG-3 (Bihar, Jharkhand, Nagaland, Odisha, Punjab, Sikkim)	<ol style="list-style-type: none"> <li>1. Successful.</li> <li>2. It was informed by NRSC that capturing coordinates of both GPS lock and photo is possible. It was discussed and decided that both these coordinates should be available. This was treated as a mandatory requirement by MoRD. <b>Action: NRSC</b>, GPS lock and photo coordinates along with the distance between the two should be available for auditing purpose</li> <li>3. It was decided in consultation with the state that 2 picture per geotag to be made mandatory. <b>Action: NRSC</b>, Minimum two pictures should be made mandatory in the GeoMGNREGA mobile application.</li> <li>4. Successful. This was treated as a mandatory requirement by MoRD. <b>Action NRSC</b>. The States pointed out that NRSC should ensure that there are least chances for tampering of Photograph prior to uploading.</li> <li>5. During the testing by Odisha and Bihar, the asset geo information uploaded was not visible on for validation in tabular formats. However in</li> </ol>

				<p>map also it was not visible immediately. Similar issues were reported by Wave-I districts during Pilot and GeoHome. This need to be resolved and was treated as a mandatory requirement by MoRD. <b>Action: NRSC</b>, The asset information from mobile to Bhuvan should be available in 2 minute cycle both on Map and in tabular formats for moderation.</p> <p>6. Sent Later: Their should be delete option from the mobile application for assets which are geo captured but not uploaded. <b>Action: NRSC</b></p> <p>7. To ensure there are no duplicate attempts by MSE for uploading the photos, it was decided that once the asset is uploaded successfully by MSE, on selection of the asset again, the pop-up window should show that the "Asset validation is pending at GAS". This was treated as a mandatory requirement by MoRD. <b>Action NRSC</b></p> <p>8. There was no check on asset data already geotagged and uploaded to the bhuvan server from the mobile application. This is important to ensure that there are no duplicates. This was treated as a mandatory requirement by MoRD. <b>Action NRSC</b>: Once the asset is pending validation or is approved or has been flagged at the level of GAS, no further uploading of the asset detail should be possible from any MSE. If the data has not been downloaded by MSE, the asset pending validation by GAS should not be allowed to be downloaded.</p>
2.2	Asset Rejection Module from App to Portal- NRSC	1. Successful rejection of asset by GAS with appropriate reason		Module of rejection could not be tested as Para 2.1 decision need to be implemented first.



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		<ol style="list-style-type: none"> <li>2. Availability of photograph from only authorized MSE in the GAS login.</li> <li>3. Measurement of time taken from rejection from the Bhuvan portal to the availability into the mobile application.</li> <li>4. Availability of rejected assets separately along with reasons in the Mobile Application for MSE</li> </ol>		<ol style="list-style-type: none"> <li>1. Para 2.2.1, 2.2.2 and 2.2.4 need to be incorporated into the system. The NRSC will ensure that appropriate security measures as highlighted in the smoke testing is available.</li> <li>2. The state requested that during the validation of asset by GAS, the asset name and description should also be visible in the moderation tabular panel as without the basic information, moderation is difficult to relate. This was treated as a mandatory requirement by MoRD. <b>Action:</b> NRSC to incorporate the asset name and description in the moderation panel.</li> <li>3. It was observed that there are no message which is displayed in the mobile phone, for assets which are rejected. This was treated as a mandatory requirement by MoRD. <b>Action NRSC:</b> Once the asset is rejected by GAS, on selection of an asset by MSE, the pop-up window should show "Asset rejected by GAS with following reasons....."</li> </ol>
2.3	Asset Flagging Module from App to NREGASoft - NRSC	<ol style="list-style-type: none"> <li>1. Successful flagging of assets along with "Key-in Discrepancy" by MSE</li> <li>2. Successful flagging of assets along with "Key-in Discrepancy" by GAS</li> <li>3. Measurement of time taken from Bhuvan to NREGASoft in transmission of flagged data</li> <li>4. Testing: Once the asset is flagged, it should not be available in the mobile application and no other mobile application should be allowed to upload</li> </ol>	STG-4(Himachal Pradesh, Karnataka, Rajasthan, Telangana, Uttarakhand)	<ol style="list-style-type: none"> <li>1. Not Successful. The flagging of asset was not working from mobile application on all devices. The asset once flagged could not be uploaded successfully. <b>Action: NRSC:</b> This bug need to be corrected.</li> <li>2. Successful with some bugs. A message pops up stating "asset is already rejected" but actually the asset is flagged and removed from map. <b>Action NRSC,</b> it should be rectified.</li> <li>3. Successful. As the flagged asset data is critical, it should be synchronised frequently. It</li> </ol>


  
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		<p>the geo information of this flagged asset.</p> <p>5. Testing: Once the asset is geo tag and approved and validated by the GAS, it should not be allowed by flagged.</p>		<p>was treated as an essential requirement by MoRD. <b>Action: NRSC</b>, As agreed the CRON to push flagged asset should be scheduled for 2 minute cycle.</p> <p>4. Successful. Only relevant Gram Panchayat data should be visible instead of complete block data. <b>Action: NIC</b>, Only assets of relevant Gram Panchayat should be visible during correction of assets in the exception report for flagged assets.</p> <p>5. Successful.</p>
2.4	MIS Module for reports- NRSC & NIC	<ol style="list-style-type: none"> <li>1. Availability of performance reports and rejection reports at the DGNO level</li> <li>2. Availability of performance reports at the SGNO Level</li> <li>3. Availability of performance reports at the Central Level</li> <li>4. Central level Login credential for National Level Management</li> </ol>	STG-5(Gujarat, Haryana, Maharashtra, West Bengal)	<ol style="list-style-type: none"> <li>1. Successful. Phone number of MSE should be visible instead of UUID for validation. <b>Action: NRSC</b>, As agreed the Phone number should also be visible in the list of MSEs at all level.</li> <li>2. Inconsistency in the data reports were noticed. <b>Action: NRSC</b>, The statistical data were found to be mismatched which need to be corrected. The drill down to block level should be available.</li> </ol>
3	Features & Improvement Suggestions- States	As per the GeoMGNERGA BF module (Annexed)	All Groups	<ol style="list-style-type: none"> <li>1. Essential Features: As discussed in the meeting the Coordinates along with date and time of the pictures captured should be available as attributes, with the asset picture on bhuvan portal.</li> <li>2. Efforts should be made to ensure live data links between NREGASoft and Bhuvan. This can be worked out after the stabilization of the current system</li> </ol>



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