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233	Jammu and Kashmir	Bandipora	Fayaz Ahmed Magray	acdoff.bandipora@gmail.com	9622732551
234	Jammu and Kashmir	Ganderbal	Gh Qadir	acdgbl@gmail.com	9419070624
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446	Odisha	Kandhamal	Mr. Rudra Narayan Panda	ori-dphulbani@nic.in	9437242363
447	Odisha	Kendrapara	Ms. Priya Ranjan Swain	ori-dkendrapada@nic.in	9439650274
448	Odisha	Khordha	Sunakar Jena	ori-dkhurda@nic.in	9437756604
449	Odisha	Koraput	Sucharu Sutapa Praharaj	ori-dkoraput@nic.in	9937453733
450	Odisha	Malkangiri	Satya Narayan Dash	ori-dmalkangiri@nic.in	9438104208
451	Odisha	Mayurbhanj	Subash Chandra Pradhan	ori-dmayurbhanj@nic.in	9861194941
452	Odisha	Nayagarh	Sunil Kumar Nayak	ori-dnayagarh@nic.in	8895993368
453	Odisha	Nuapada	Sanjay Kumar Mishra	ori-dnuapada@nic.in	9437759224
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455	Odisha	Rayagada	Aswani Pati	ori-drayagada@nic.in	9438070277

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457	Odisha	Sonepur	Manoj Kumar Mishra	ori-dsonepur@nic.in	9437241680
458	Odisha	Sundargarh	Srikanta Nanda	ori-dsundargarh@nic.in	9437341951
459	Punjab	Mansa	Mr. Mandeep Singh	dpenregamansa@gmail.com	8288048237
460	Punjab	Fazilka	Mr. Atul Monga	mgnregafazilka@gmail.com	9855196300
461	Punjab	Tarn Taran	Mr. Lovejit Singh	tarntaran.nrega@gmail.com	8146674447
462	Punjab	Amritsar	Mr. Bikram Singh	nrega.asr@gmail.com	9464433273
463	Punjab	Jalandhar	Mr. Sumit Sharma	adcd.jal@gmail.com	9803081555
464	Punjab	Sbs Nagar	Mr. Gurumukh Singh	dpc.nrega.sbsn@gmail.com	9463851886
465	Punjab	Hoshiarpur	Mr. Puneet	adcdevhsp@gmail.com	9888808466
466	Punjab	Bathinda	Mr. Kuldeep Singh	nregabathinda@gmail.com	8146623412
467	Punjab	Barnala	Mr. Mandeep Singh	mgnrega.barnala@gmail.com	9815430760
468	Punjab	Ferozpur	Mr. Raman Sachdeva	adpcmgnrega@gmail.com	9781000139
469	Punjab	Fatehgarh Sahib	Mr. Prem Singh	dpcfgs@yahoo.in	9779388907
470	Punjab	Faridkot	Mr. Lalit	nregafaridkot@gmail.com	7837000490
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472	Punjab	Muktsar	Mr. Harpreet Sharma	mktnrega@gmail.com	9501411988
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474	Punjab	Roopnagar	Mr. Ganesh	adcdnregarup@yahoo.in	9530701203
475	Punjab	Sas Nagar	Mr. Sukhdeep Singh	zp.mohali@gmaill.com	9914020208
476	Punjab	Ludhiana	Mrs. Sonia	adcd_ldhnrega@rediffmail.com	8146601479
477	Punjab	Gurdaspur	Mrs. Isha Mahajan	adcd_gsp@yahoo.co.in	8427009230
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479	Punjab	Kapurthala	Mr. Rakesh	adcdkpt@gmail.com	8872403100
480	Punjab	Pathankot	Mrs. Nidhi	mgnrega.ptk@gmail.com	9988725699
481	Rajasthan	Ajmer	Sh. Pankaj Sharma	pd-ajm-rj@nic.in	94140-24722
482	Rajasthan	Alwar	Sh.rakesh Gupta	rggupta071@gmail.com	96940-96209, 94133-04285
483	Rajasthan	Banswara	Sh.chagan Lal Bunkar	pd-ban-rj@nic.in	94141-03727
484	Rajasthan	Baran	Sh.muthura Lal Meena, Xen	xenegsbaran@gmail.com	94145-53995
485	Rajasthan	Barmer	Kabir Aktar	egsmm.bar@gmail.com	94141-05947
486	Rajasthan	Bharatpur	Sh. Sunil Gupta	pd-bha-rj@nic.in	95303-02097
487	Rajasthan	Bhilwara	Sh. Roop Lal Sharma	rpns.xen@gmail.com	94146-16823
488	Rajasthan	Bikaner	Sh. Rewatram Parihar	xen.egs.bkn@gmail.com	94141-87600
489	Rajasthan	Bundi	Sh. Lalit Rav (Aen)	xen.egsbundi@gmail.com	7424947500
490	Rajasthan	Chittorgarh	Sh.suresh Badala	ceo_nregschittor@yahoo.com	94144-98051
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492	Rajasthan	Dausa	Sh. Ashok Soni (Aen)	xennrega.dau@gmail.com	9414273446
493	Rajasthan	Dholpur	Sh. Harbhan Singh	xennrega.dho@gmail.com	94140-78035
494	Rajasthan	Dungarpur	Sh.s.l.chaplot	xenegs.dun@gmail.com	9414170368

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497	Rajasthan	Jaisalmer	Sh.p.k.bhargava	pramodkbhargava@gmail.com	94600-00430
498	Rajasthan	Jalor	Sh.hari Krishna	egsmm.jal@gmail.com	94139-57325
499	Rajasthan	Jhalawar	Sh. Indrajeet Nimesh	egsmmjhala@gmail.com	96729-95495
500	Rajasthan	Jhunjhunu	Sh.sayarmal Meena	egsmm.jhun@gmail.com	95303-06484
501	Rajasthan	Jodhpur	Sh.nresh Bohra	nbohra1962@gmail.com	94143-50227
502	Rajasthan	Karauli	Sh.badri Prasad Sharma	xenegskar@yahoo.co.in	9928224334
503	Rajasthan	Kota	Sh.rajesh Jasoria	po.nrega.kota@gmail.com	94149-66880
504	Rajasthan	Nagaur	Sh.ramjan Ali	pd-nag-rj@nic.in	94145-86145
505	Rajasthan	Pali	Sh. Rajendra Dholia	xenegs_pali@yahoo.in	94142-69462
506	Rajasthan	Pratapgarh	Sh.moh.irsadkhan	zilaparishad.pgh@gmail.com	9414551473
507	Rajasthan	Rajsamand	Sh.kamlesh Sanadya	pd-raj-rj@nic.in	94141-82705
508	Rajasthan	Sawai Madhopur	Sh.bimlesh Gupta	xenegssaw@yahoo.co.in	94142-09298
509	Rajasthan	Sikar	Sh. Sriniwas Nehra	mis.sik.zp@gmail.com	9414773893
510	Rajasthan	Sirohi	Sh.rajpal Singh Rinva	egsmm.sir@gmail.com	94145-13940
511	Rajasthan	Sri Ganganagar	Sh. Prem Sunder Agrawal	aggarwal.ps@gmail.com	98292-97600
512	Rajasthan	Tonk	Sh.hari Singh Meena	egsmm.tonk@gmail.com	9414962903
513	Rajasthan	Udaipur	Sh.haqimuddin Taj	mmegsudr@gmail.com	9414157230
514	Sikkim	South Sikkim	Mr. Manoj Pradhan	south.adpc@gmail.com	9002381089
515	Sikkim	North Sikkim	Lalit Narayan Giri	adpcnorth@gmail.com	9733245007
516	Sikkim	East Sikkim	Ms. Betty Subedi	adpceast@gmail.com	8768439696
517	Sikkim	West Sikkim	Mr. Satyan Kr Thapa	west.adpc@gmail.com	9593283415
518	Tamilnadu	Kancheepuram	S.thanikachalam	thaniks_ae@yahoo.com	7402606095
519	Tamilnadu	Ariyalur	K. Senthilkumar	eeksk@ymail.com	9047554362
520	Tamilnadu	Tiruppur	S. Sadaiappan	sadaiappan.s@gmail.com	7373704572
521	Tamilnadu	Theni	S. Sankarajothi	sankarjmj@gmail.com	7373704583
522	Tamilnadu	Tiruvallur	V. Rajavel	eerdtlr@yahoo.co.in	7373704562
523	Tamilnadu	Cuddalore	K. Prabahar	eerdcud@gmail.com	7373704563
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526	Tamilnadu	Tiruvannamalai	P.ramakrishnan	ramkieerd@gmail.com	7373704566
527	Tamilnadu	Salem	R. Venkateswaran	drdaslm@nic.in	7373704567
528	Tamilnadu	Namakkal	A.saravanakumar	drdanmk@nic.in	7373704568
529	Tamilnadu	Dharmapuri	N. Arulselvi	eedrdadpi@yahoo.com	7373704569
530	Tamilnadu	Krishnagiri	S. Muthusamy	eedrdakgi@yahoo.com	7373704570
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532	Tamilnadu	Coimbatore	R. Chandrasekar	chandru.arunafeb16@gmail.com	7373704573
533	Tamilnadu	The Nilgiris	N.pasupathi	pbakyashri@gmail.com	7373704591

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535	Tamilnadu	Nagapattinam	V. Selvaraj	eeselvaraj2014@gmail.com	7373704575
536	Tamilnadu	Tiruvarur	K. Panneerselvam	kpselvam.my1@gmail.com	7402607522
537	Tamilnadu	Tiruchirappalli	Anuradha	eetrichydrda@gmail.com	7373704577
538	Tamilnadu	Karur	M. Kavitha	mukavi77@gmail.com	7373704578
539	Tamilnadu	Perambalur	A.maviyathul Musiriyal	drdapmb@nic.in	7373704580
540	Tamilnadu	Pudukkottai	K. Josephine Nirmal	kjnirmala1971@gmail.com	9976504202
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542	Tamilnadu	Kanniyakumari	S. Aezhisai Selvi	eerdkkm@gmail.com	7373704590
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545	Tamilnadu	Virudhunagar	A.g. Sethuraman	argsraman@gmail.com	7373704586
546	Tamilnadu	Sivagangai	G. Sivarani	sivarani1968@gmail.com	7373704587
547	Tamilnadu	Tirunelveli	A. Hasan Ibrahim	drdapmgsy2008@yahoo.co.in	7373704588
548	Tamilnadu	Thoothukkudi	K.murugan	murugan_sri93@yahoo.com	7373704589
549	Tamilnadu	Kancheepuram	S.thanikachalam	thaniks_ae@yahoo.com	7402606095
550	Tamilnadu	Ariyalur	G.selvakumaran	drdaari@nic.in	7373704579
551	Tamilnadu	Tiruppur	K.senthilkumar	eeksk@ymail.com	7373704572
552	Tamilnadu	Theni	S. Sankarajothi	sankarjmj@gmail.com	7373704583
553	Tamilnadu	Tiruvallur	S.sekar	erssekar@gmail.com	7373704562
554	Tamilnadu	Cuddalore	R.malarvizhi	eerdcud@gmail.com	7373704563
555	Tamilnadu	Villupuram	S.raja	drdavpm@nic.in	
556	Tamilnadu	Vellore	V.rajavel	drdavel@nic.in	9444201746
557	Tamilnadu	Tiruvannamalai	P.ramakrishnan	ramkieerd@gmail.com	7373704566
558	Tamilnadu	Salem	S.arumugham	drdaslm@nic.in	7373704567
559	Tamilnadu	Namakkal	S.balakrishnan	drdanmk@nic.in	7373704568
560	Tamilnadu	Dharmapuri	R.premkumar	eedrdadpi@yahoo.com	7373704569
561	Tamilnadu	Krishnagiri	S. Muthusamy	eedrdakgi@yahoo.com	7373704570
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565	Tamilnadu	Thanjavur	S.srinivasan	eerdtnj@gmail.com	7373704574
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567	Tamilnadu	Tiruvarur	V.selvaraju	eeselvaraj2014@gmail.com	7402607522
568	Tamilnadu	Tiruchirappalli	G.anuradha	eetrichydrda@gmail.com	7373704577
569	Tamilnadu	Karur	S. Sadaiappan	sadaiappan.s@gmail.com	7373704578
570	Tamilnadu	Perambalur	K. Josephine Nirmal	kjnirmala1971@gmail.com	7373704580
571	Tamilnadu	Pudukkottai	A.g. Sethuraman	argsraman@gmail.com	9976504202
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573	Tamilnadu	Kanniyakumari	G. Sivarani	sivarani1968@gmail.com	7373704590
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577	Tamilnadu	Sivagangai	S. Eazhisaiselvi	drdasvg@nic.in	7373704587
578	Tamilnadu	Tirunelveli	C. Sakthimurugan	drdatnv@nic.in	7373704588
579	Tamilnadu	Thoothukkudi	K.murugan	murugan_sri93@yahoo.com	7373704589
580	Telangana	Ranga Reddy	Haritha	pd_dwmarrd@yahoo.com	7095512222
581	Telangana	Medak	Mr. V.l. Surender Karan	dwma_medak@yahoo.co.in	7095507000
582	Telangana	Alidabad	Mr. Shankar	dwma_adbd@yahoo.co.in	9505696969
583	Telangana	Karimnagar	Mr. Y.v. Ganesh	dwmakmnr@yahoo.co.in	709551611
584	Telangana	Khammam	Dr.p. Jagarth Kumar Reddy	dpapkmm@yahoo.co.in	7095502001
585	Telangana	Mahabubnagar	Mr. K. Damodar Reddy	dwmambar@gmail.com	7095505555
586	Telangana	Nalgonda	Mr. K. Damodar Reddy	dwmanlg@yahoo.com	7095508888
587	Telangana	Nizamabad	Mr. K.venkateshwarlu	dwma_nzb@rediffmail.com	7095510001
588	Telangana	Warangal	Mr. Y.sekhar Reddy	dwma_wgl@yahoo.com	7095514999
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590	Tripura	Sepahijala	Abhijit Paul Choudhury	abhijitpaulnic@gmail.com	8731861911
591	Tripura	North Tripura	Paritosh Dey	dey.paritosh23@gmail.com	9615687590
592	Tripura	Unakoti	Pritam Chanda	pritamchandait@gmail.com	9615687590
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594	Tripura	Khowai	Sankar Acharjee	sankarsbs07@gmail.com	9774744475
595	Tripura	Gomati	Ranabir Karmakar	kingrbkme87@gmail.com	8974790635
596	Tripura	South Tripura	Paresh Tripura	pareshtripura.nic@gmail.com	8731998444
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600	Uttar Pradesh	Jhansi	Vikas Mishra	drda-jha@nic.in	9415334202
601	Uttar Pradesh	Mahoba	P.n.dixit	drada-mhb-up@nic.in	9415230019
602	Uttar Pradesh	Saharanpur	Chndrashekar	drda-sah@nic.in	9415706127
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604	Uttar Pradesh	Aligarh	Amrendra Pratap Singh	drda-alg@nic.in	9412452481
605	Uttar Pradesh	Allahabad	S.k.singh	drda-alb@nic.in	8765983042
606	Uttar Pradesh	Ambedkar Nagar	Vijay Shankar Rai	drda-amd@nic.in	9454465307
607	Uttar Pradesh	Amethi	R.k.verma	csmnagar1amethi1@gmail.com	9454465473
608	Uttar Pradesh	Amroha	Balram Kumar	drda-jpn@nic.in	9412873347
609	Uttar Pradesh	Auraiya	Anil Singh	drda-aur@nic.in	9415284727
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612	Uttar Pradesh	Bahraich	Virendra Singh	drda-beh@nic.in	
613	Uttar Pradesh	Ballia	Upendra Kr. Pathak	drda-bal@nic.in	9415721445
614	Uttar Pradesh	Balrampur	Sheshmani Singh	drda-bal.up@nic.in	8765983050
615	Uttar Pradesh	Banda	Girish Kr. Pathak	drda-ban@nic.in	9415322541
616	Uttar Pradesh	Bareilly	Sahitya Prakash Mishra	drda-brl@nic.in	9454464643
617	Uttar Pradesh	Basti	Anil Kr Singh	drda-bas@nic.in	9415126300
618	Uttar Pradesh	Bijnor	Heera Singh	drda-bij@nic.in	9454465144
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620	Uttar Pradesh	Bulandshahr	Murarilal	drda-bul@nic.in	9454465053
621	Uttar Pradesh	Chandauli	Jagdish Tripthi	drda-cha@nic.in	8765983059
622	Uttar Pradesh	Chitrakoot	Ajisen Narayan Mishra	drda-chi@nic.in	9415254385
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625	Uttar Pradesh	Etawah	Anil Kumar Singh	drda-eta@nic.in	9454464971
626	Uttar Pradesh	Faizabad	Vidya Nath Shukla	drda-faz@nic.in	9415309176
627	Uttar Pradesh	Farrukhabad	Dr. Daya Ram Vishwakarma	drda-far@nic.in	9415375234
628	Uttar Pradesh	Fatehpur	R.p. Mishra	drda-fat@nic.in	9415136201
629	Uttar Pradesh	Firozabad	Servesh Chandra Yadav	drda-frz@nic.in	9412370736
630	Uttar Pradesh	Gautam Buddha Nagar	Awdhesh Singh	drda-gbn@nic.in	9450000881
631	Uttar Pradesh	Ghaziabad	Shashikant Tripathi	drda-gha@nic.in	9899093859
632	Uttar Pradesh	Ghazipur	Anaya Kumar Mishra	drda-ghz@nic.in	9415367694
633	Uttar Pradesh	Gonda	Mradhal Singh	drda-gon@nic.in	8765983071
634	Uttar Pradesh	Gorakhpur	Anil Kumar	drda-grk@nic.in	9454380800
635	Uttar Pradesh	Hamirpur	Mahendra Dev	drda-ham@nic.in	9473680786
636	Uttar Pradesh	Hapur	Pramod Saxena	drdahapur@gmail.com	9412108918
637	Uttar Pradesh	Hardoi	Rajnath Prasad Bhagat	drda-har@nic.in	9415220443
638	Uttar Pradesh	Hathras	C.s.shukla	drda-hat@nic.in	9454465531
639	Uttar Pradesh	Jalaun	Pramod Singh Chandel	drda-jal@nic.in	9412510627
640	Uttar Pradesh	Jaunpur	Rambabu Tripathi	drda-jan@nic.in	9453787144
641	Uttar Pradesh	Kannauj	I.p.singh	drda-knj@nic.in	8765983080
642	Uttar Pradesh	Kanpur Dehat	S.k.singh	drda-knp@nic.in	8765983081
643	Uttar Pradesh	Kanpur Nagar	A.k.dixit	drda-knpu@nic.in	9415153738
644	Uttar Pradesh	Kashganj	Rameshchand	drda-krn@nic.in	9454465521
645	Uttar Pradesh	Kaushambi	Ravishankar Rai	drda-kos@nic.in	8765983084
646	Uttar Pradesh	Kheri	P.k.rai	drda-lak@nic.in	9305011361
647	Uttar Pradesh	Kushi Nagar	Mahendra Prasad Chaubey	drda-kus@nic.in	9415213259

12. Calendar Events

S.No.	Event/Letter Description	Date	Participants
1	Ministry organises a workshop in which 12 States who had previously implemented GIS in some form, NRSC Hyderabad, C-DAC Pune, NIC GIS Division participated. The States are consulted on Concept Note of GIS implementation under MGNREGA in workshop	8-Apr-2016	- Secretary, Department of Space (DoS) - Secretary, Department of Electronics & Information Technologies (DeitY) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC) - Centre for Development of Advanced Computing (CDAC)
2	Minutes of Meeting (MoM) of workshop held on 8th April, 2016 was made available with 12 States, NRSC Hyderabad, C-DAC, NIRD, NIC-GIS Division	22-Apr-2016	- 12 States which implemented similar system - Director, National Remote Sensing Center (NRSC) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Centre for Development of Advanced Computing (CDAC)
3	Video Conference with Course of Action (CoA) group on recomendations, functional requirements, device configuration and other suggestions or clarifications received from States	04-May-2016	- 7 States which are the CoA members - Director General, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC) - Centre for Development of Advanced Computing (CDAC)
4	Recomendations and Sign-off by Course of Action (CoA) group on recomendations received on GIS implementation on Mahatma Gandhi NREGA	05-May-2016	- 7 States which are the CoA members

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650	Uttar Pradesh	Maharajganj	A.k.muarya	drda-mah@nic.in	8765983090, 7800209822
651	Uttar Pradesh	Mainpuri	R.s.maurya	drda-mai@nic.in	9454748916
652	Uttar Pradesh	Mathura	A.k. Bajpai	drda-mat@nic.in	9415129924
653	Uttar Pradesh	Mau	Harishchandra Sing	drda-mau@nic.in	9454464632
654	Uttar Pradesh	Meerut	Ravi Kishore Trivedi	drda-mrt@nic.in	9956658621
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657	Uttar Pradesh	Muzaffarnagar	V.p. Srivastava	drda-muz@nic.in	9454465194
658	Uttar Pradesh	Pilibhit	S.k.dwedi	drda-plb@nic.in	8785983098
659	Uttar Pradesh	Prstapgarh	Janardan Prasad Yadav	drda-pra@nic.in	9415878638
660	Uttar Pradesh	Rae Bareli	S.k.upadhyay	drda-rae@nic.in	8922944456
661	Uttar Pradesh	Rampur	B.p.singh	drda-ram.hub@nic.in	9454465184
662	Uttar Pradesh	Sambhal	Harendra Kr. Singh	drdasambhal@gmail.com	9450842256
663	Uttar Pradesh	Sant Ravidas Nagar	Ajeet Kr. Singh	drda-srn.up@nic.in	7897699373
664	Uttar Pradesh	Shahjahanpur	Rajesh Jha	drda-sha@nic.in	8765983103
665	Uttar Pradesh	Shamli	Baliram Verma	mhtmlk5@gmail.com	9415987748
666	Uttar Pradesh	Shravasti	Raghvendra Singh	drda-shr@nic.in	9919973313
667	Uttar Pradesh	Siddharth Nagar	Umesh Chandra Tiwari	drda-sid@nic.in	9956362931
668	Uttar Pradesh	Sitapur	K.k.singh	drda-sit@nic.in	8765983112
669	Uttar Pradesh	Sonbhadra	Dev Nandan Dubey	drda-son@nic.in	9415155647
670	Uttar Pradesh	Sultanpur	S.k.tiwari	drda-sul@nic.in	8765983114
671	Uttar Pradesh	Unnao	Rajesh Kr Mishra	drda-unn@nic.in	9005993315
672	Uttarakhand	Haridwar	Mr. Amrit Rathi	amritrathi12@gmail.com	9837645717
673	Uttarakhand	Us Nagar	Mr. R.c. Tiwari	mgnregausn@gmail.com	8797653325
674	Uttarakhand	Bageshwar	Mr. Mahesh Kumar	ddobageshwar7@gmail.com	9411159840
675	Uttarakhand	Chamoli	Mr. Prakash Rawat	ddo_chamoli@yahoo.co.in	9411313271
676	Uttarakhand	Champawat	Mr. Vivek Upadhyay	chpnrega@gmail.com	9456395231
677	Uttarakhand	Dehradun	Mr. S.m. Dobhal	ddoddn@gmail.com	8191099672
678	Uttarakhand	Nainital	Mr. A.s. Gunjyal	vikas.bhawan18@gmail.com	9412044215
679	Uttarakhand	Pauri	Mr. Ved Prakash	ddopauri@gmail.com	9411110286
680	Uttarakhand	Pithoragarh	Mr. Gopal Giri	ddopith11@gmail.com	9412925575
681	Uttarakhand	Rudraprayag	Mr. Sunil Kumar	mnregarpg@gmail.com	9627221137
682	Uttarakhand	Tehri	Mr. Pradeep Pandey	ddotehril@gmail.com	9412093900
683	Uttarakhand	Uttarkashi	Mr. Anand Singh	ddo.uttarkashi@gmail.com	9411735051
684	Uttarakhand	Almora	Md. Aslam	ddo.alm@gmail.com	9411167370
685	West Bengal	North 24Parganas	Arunabha Das	misnrega24n@gmail.com	9051113436
686	West Bengal	Hooghly	Sougata Mandal	nodal.hooghly@gmail.com	9903066681
687	West Bengal	Alipurduar	Kallol Bhattacherjee	mgnrega.apd@gmail.com	9775974280

S.No.	State	District	Dgno Name	E-mail	Phone
688	West Bengal	South 24 Par-ganas	Pralay Das	nregadistrictcell_south-24pgs@yahoo.co.in	8335079076
689	West Bengal	Birbhum	Chittaranjan Mondal	mgnrega.birbhum@gmail.com	9434222916
690	West Bengal	Bankura	Deepak Mondol	wbregs.bankura@gmail.com	9531762060
691	West Bengal	Burdwan	Satyaveer Kumar	nregs.bdn@gmail.com	9474698549
692	West Bengal	Coochbehar	Anirban Saha	nrega.cbr@gmail.com	9434405129
693	West Bengal	Dghc	Pratistha Giri	secretarynregs_dghc@yahoo.co.in	7797428877
694	West Bengal	Dakshin Dinajpur	Santanu Basak	dpcnrega_dd@yahoo.co.in	9433779065
695	West Bengal	Dinajpur Uttar	Bhaskar Banik	mgnrega.ud@gmail.com	7501803500
696	West Bengal	Howrah	Ayan Mukherjee	nregahowrah@gmail.com	9564608009
697	West Bengal	Jalpaiguri	Rana Talukdar	nrega.jal@gmail.com	9733264164
698	West Bengal	Malda	Satyabrata Panda	dnonregs.malda@gmail.com	9434130077
699	West Bengal	Paschim Medin-ipore	Arindam Das	nrega.midwest@gmail.com	9732546975
700	West Bengal	Purba Medini-pore	Swarnendu Das	mgnrega.tamluk@gmail.com	9831969006
701	West Bengal	Murshidabad	Rabiul Islam	msd_nrega@rediffmail.com	9732617381
702	West Bengal	Nadia	Arup Ganguly	nreganadia.dno@gmail.com	9153558045
703	West Bengal	Purulia	Debashish Chowdhury	nrega.purulia@gmail.com	9434202588
704	West Bengal	Smp	Lipika Rahut	wbslg.nregscell@gmail.com	9832026246

S.No.	Event/Letter Description	Date	Participants
5	The Ministry called for a meeting under the chairmanship of Secretary, Rural Development, with Department of Space (DoS), National Remote Sensing Center (NRSC), Department of Electronics & Information Technologies (DietY), National Institute of Rural Development & Panchayati Raj (NIRD & PR) and National Informatics Centre (NIC) to discuss the importance of GIS in MGNREGA and coordination required between concerned organisations.	30-May-2016	- Secretary, Department of Space (Dos) - Secretary, Department of Electronics & Information Technologies (DeitY) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC)
6	A Programme Evaluation Review Technique (PERT) Chart was prepared with all the action points and milestone to monitor the progress.	1-Jun-2016	Shared with NRSC, NIC, NIRD&PR.
7	Letter of Acceptance of GIS Implementation of Mahatma Gandhi NREGA Asset through Bhuvan covering the phase-wise scope, functionaries, training implementation plan, role and responsibility and timelines.	6-Jun-2016	- Secretary, Department of Space (DoS) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC)
8	Standard Operating Procedure (SoP) for Web Service, developed by NIC. The web services shares the NREGASoft MIS data to Bhuvan	15-Jun-2016	- Director, National Remote Sensing Center (NRSC) - Senior Technical Director, National Informatics Centre (NIC)

S.No.	Event/Letter Description	Date	Participants
9	Letter for Signining of MoU between Ministry of Rural Development and National Remote Sensing Center (NRSC) - Rescheduled	17-Jun-2016	- Secretary, Department of Space (DoS) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director, National Remote Sensing Center (NRSC)
10	Signing Memorandum of Understanding (MoU) for GIS Implementation of Mahatma Gandhi NREGA Assets between Department of Rural Development, Ministry of Rural Development and National Remote Sensing Center (NRSC), Indian Space Research Organisation, Department of Space	24-June-2016	- Secretary, Indian Space Research Organisation (ISRO), Department of Space - Secretary, Department of Electronics & Information Technologies (DeiT) - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC) - Other Divisions of Ministry of Rural Development
11	Ministry publishes the Standard Operating Procedure (SoP) on GIS Implementation in Mahatma Gandhi NREGA through Bhuvan. Rollout strategy and training plan are shared with States for identification of Districts (i.e. GPDs) and preparation of training calendar for both Wave-I and Wave-II	27-Jun-2016	- All States
12	Ministry called for a Video Conference with concerned organisations on progress and integration	29-Jun-2016	- Bhuvan Team, National Remote Sensing Center (NRSC) - Advisor & Head, CGARD, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Senior Technical Director, National Informatics Centre (NIC)
13	Letter of acceptance on proposal made by NIRD & PR on GeoMGNREGA training and capacity building proposal for states	30-Jun-2016	- Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR)

S.No.	Event/Letter Description	Date	Participants
14	Ministry called for a Video Conference to walk through on Rollout Strategy of GeoMGNREGA for Pilot, Wave-I and Wave-II, Procedure for Asset Creation and Nomination Process of GIS Pioneering Districts (GPDs)	4-Jul-2016	- All States - Senior Technical Director, NIC - C-GARD, NIRD & PR
15	Video Conference is called to check the progress and preparedness of GeoMGNREGA for Pilot and GeoHome of Wave-I Districts.	5-Jul-2016	- Bhuvan Team, National Remote Sensing Center (NRSC) - NREGASoft Team, National Informatics Centre (NIC)
16	Testing of integration between NREGASoft and Bhuvan data migration and Mobile application	19-Jul-2016	- Bhuvan Team, National Remote Sensing Center (NRSC) - NREGASoft Team, National Informatics Centre (NIC) - CGARD, National Institute of Rural Development & Panchayati Raj (NIRD & PR)
17	States being apprised about detailed rollout, registration, responsibilities and training plan by MoRD	22-Jul-2016	- All States - Bhuvan Team, National Remote Sensing Center (NRSC) - NREGASoft Team, National Informatics Centre (NIC) - CGARD, National Institute of Rural Development & Panchayati Raj (NIRD & PR)
18	Training held for GeoMGNREGA Regional Resource Persons Training (GMRRP) and for 27 pilot Gram Panchayat officials for conducting Pilots. The two day training was held jointly by MoRD, NRSC, NIC and NIRD&PR, Hyderabad	29-July-2016 to 30-July-2016	- GMRRP, GAS & MSE of Pilot Panchayats of GPDs - Bhuvan Team, National Remote Sensing Center (NRSC) - NREGASoft Team, National Informatics Centre (NIC) - CGARD, National Institute of Rural Development & Panchayati Raj (NIRD & PR)

S.No.	Event/Letter Description	Date	Participants
19	One day workshop i.e. National Orientation Workshop (NOW) has called for covering GeoMGNREGA Overview, Operating Procedure, Demostration of Mobile App and Portal, unevil the Standard Operating Manual for implementation	9-Aug-2016	- All States - Secretary, Indian Space Research Organisation (ISRO), Department of Space - Secretary, Department of Electronics & Information Technologies - Director General, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC) - Other Divisions of Ministry of Rural Development
20	Mop up online training imparted by MoRD, NRSC and NIC directly to field functionaries. Around 250,000 officials were invited to attend the Live video conference	24-Aug-2016	- All States - Bhuvan Team, National Remote Sensing Center (NRSC) - C-GARD, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Senior Technical Director, National Informatics Centre (NIC)
21	Letter to states for the launch of GeoMGNREGA in Wave-I District	29-Aug-2016	- All States - Director, National Remote Sensing Center (NRSC) - C-GARD, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Senior Technical Director, National Informatics Centre (NIC)
22	Ministry has conducted 'Smoke Testing' for Wave-I Districts by which subset of test cases are executed that cover the most important functionality of the GeoMGNREGA System. The test cases are run by 'Smoke Tester Group' includes SGNOs and one field level official from States	16-Sep-2016	- 'Smoke Tester Group' includes SGNOs and one field level official from States - Director, National Remote Sensing Center (NRSC) - C-GARD, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Senior Technical Director, National Informatics Centre (NIC)

S.No.	Event/Letter Description	Date	Participants
23	GeoMGNREGA Working Group has been constituted by each State to review the quality and preparedness before the launch event. The States were informed about the monitoring governance framework under GeoMGNREGA.	5-Oct-2016	- All States - Director, National Remote Sensing Center (NRSC) - C-GARD, National Institute of Rural Development & Panchayati Raj (NIRD&PR) - Senior Technical Director, National Informatics Centre (NIC)
24	Final Review meeting on GeoMGNREGA Working Group called by MoRD on review of quality of Mahatma Gandhi NREGA assets geo tagged.	10-Nov-2016	- All States - Director, National Remote Sensing Center (NRSC) - CGARD, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Senior Technical Director, National Informatics Centre (NIC)
25	Rollout Event by Hon'ble Minister for Rural Development in Wave-I Districts where the geotagged Mahatma Gandhi NREGA assets are made visible in public domain.	30-Nov-2016	- Secretary, Department of Space (DoS) - All States - Director General, National Institute of Rural Development & Panchayati Raj (NIRD & PR) - Director General, National Informatics Centre (NIC) - Director, National Remote Sensing Center (NRSC)

13. Important Circulars and Announcements

1. Invitation to states for GIS workshop dated 31 March 2016

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

Krishi Bhawan, New Delhi
Dated: 31ʳ March, 2016

To

1. **The Principal Secretaries/ Secretaries of Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Odisha, Telangana, Gujarat, West Bengal, Rajasthan, Punjab and Tripura -** Department of Rural Development/ Panchayati Raj (In Charge MGNREGA)
2. **Joint Secretary (IT),** MoRD
3. **Dr. Vasala Madhava Rao, Advisor & Head,** C-GARD, NIRD
4. **Shri Vishnu Chandra, DDG, Remote Sensing and GIS,** NIC-GIS
5. **Dr. Vinay Kumar Dadhwal, Director,** NRSC
6. **Prof. Rajat Moona, Director General,** C-DAC

Subject:- Workshop on implementation of GIS for Mahatma Gandhi NREGA.

The Ministry of Rural development is planning for implementation of centralised Geographical Information System (GIS) for Mahatma Gandhi NREGA. Initially, NIC will develop the Data Acquisition Mobile App **(DAMA)** and a web based GIS application to visually identify the assets under Mahatma Gandhi NREGA. Later on solution will integrate social and feedback system through a unique Citizen Centric Mobile Application **(CCMA)**. The solution will **integrate disparate Geospatial data of various Ministries by publishing** layers like village boundaries, census data, topographic data, land records, MPLADS data, School data, Agricultural data, IWMP, PMKSY etc.. This will help in **community based participatory planning at the grass root level and Monitoring**.

Many of the States have implemented similar system in some form or the other. For wider consultation with the State Governments who have implemented GIS, **one day workshop (agenda attached) is being convened on 8th April, 2016 at Unnati Hall, Krishi Bhawan, New Delhi, from 10.00 a.m. to 4.00 p.m..** The States are requested to make the presentation on the following:-

   i. Implementation of GIS under Mahatma Gandhi NREGA in your State.

   ii. Inputs on the concept note - "GIS Implementation of MGNREGA" and future road map. (Kindly find attached the concept note titled "GIS Implementation of MGNREGA").

You are requested to kindly depute Commissioners (MGNREGA), State MIS nodal officer and other resource persons associated with the GIS in the State and technical resource person of sufficient seniority who are well versed with the GIS implementation to attend the workshop. The confirmation, along with names of the participants may kindly be sent at kushal@nic.in, latest by 6th April, 2016.

Encls: As above.

Yours faithfully

(Aparajita Sarangi)
Joint Secretary (RE)

Copy to:-

   1. PPS to Secretary, RD
   2. Sr. Technical Director - NIC, DRD
   3. DG-NIRD

Agenda for Workshop on implementation of GIS for Mahatma Gandhi NREGA.

Sl. No	Activity/ event	Time
1	Welcome address by Joint Secretary, MGNREGA	10.00 A.M to 10.05 A.M
2	Address by Secretary, RD / Additional Secretary, RD	10.05 A.M to 10.15 A.M
3	Presentation by Programme Division, McRD	10.15 A.M to 10.30 A.M
4	Presentation by States (15 minutes each)	10.30 A.M to 01.30 P.M
5	Working Lunch	01.30 P.M to 02.00 P.M
6	Presentation by NRSC	02.00 P.M to 02.15 P.M
7	Presentation by C-DAC	02.15 P.M to 02.30 P.M
8	Demo of DAMA by NIC, DRD	02.30 P.M to 02.45 P.M
9	Presentation by GIS-NIC	02.45 P.M to 03.00 P.M
10	Open House	03.00 P.M to 03.30 P.M
11	Proposed Action Plan by C-GARD	03.30 P.M to 03.40 P.M
12	Vote of Thanks	03.40 P.M to 03.50 P.M

2. Minutes of workshop on GIS Implementation dated 22 April 2016

F. No. :M-11011/02/2016-RE-III
Government of India
Ministry of Rural Development
Department of Rural Development
(RE Division)

Krishi Bhawan, New Delhi
Dated 22 April, 2016

Subject: Minutes of Workshop on implementation of GIS for Mahatma Gandhi NREGA.

Please find the enclosed herewith the copy of the minutes of full day Workshop on implementation of GIS for Mahatma Gandhi NREGA under the chairmanship of Secretary, RD on Friday 08th April, 2016 in Unnati Hall, Krishi Bhawan, New Delhi - 110001, on subject mentioned above for information and necessary action.

Encl: As above

Yours faithfully,

(Dr. Kushal Pathak)
Director (MGNREGA)

Copy to:

1. The Principal Secretaries/ Secretaries of Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Odisha, Telangana, Gujarat, West Bengal, Rajasthan, Punjab and Tripura - Department of Rural Development/ Panchayati Raj (In Charge MGNREGA)
2. Joint Secretary (IT), MoRD
3. Dr. Vasala Madhava Rao, Advisor & Head, C-GARD, NIRD
4. Shri Vishnu Chandra, DDG, Remote Sensing and GIS, NIC-GIS
5. Dr. Vinay Kumar Dadhwal, Director, NRSC
6. Prof. Rajat Moona, Director General, C-DAC

Minutes of Workshop held on 08th April, 2016 on Implementation of GIS for Mahatma Gandhi NREGA

A workshop was held on 8th April, 2016 at Unnati Hall, Krishi Bhavan, New Delhi, under the chairmanship of Secretary, RD to discuss: the Implementation of GIS under Mahatma Gandhi NREGA in States and inputs on the concept note "GIS Implementation of MGNREGA" and future road map.

As per the decision of Ministry the GIS Implementation of MGNREGA has to be coordinated with the involvement of NIC, NIRD&PR and ISRO to capture best practices and technologies. Ultimately ISRO's Bhuvan platform needs to be linked. Keeping these requirements, following Divisions/ Organisations were also invited to attend the conference:

Joint Secretary (IT), MoRD

Dr. Vasala Madhava Rao, Advisor & Head, C-GARD, NIRD&PR

Shri Vishnu Chandra, DDG, Remote Sensing and GIS, NICGIS

Dr. Vinay Kumar Dadhwal, Director, NRSC

Prof. Rajat Moona, Director General, CDAC

List of participants is attached as Annexure 1.

Following States made the Presentations:

Karnataka

Maharashtra

Gujarat

Andhra Pradesh and Telangana

Odisha

West Bengal

Tamil Nadu

States made the presentation in which following point came up:

Many of the States have set up GIS technology either by involving State Remote Sensing Application Centre, State NIC and in some case the whole project has been given on turnkey basis to outside vendor.

All States who have implemented the GIS technology have utilised the mobile Apps to capture the information from the field-level.

Many of the States have integrated the MGNREGA / Rural Department data with their overall State GIS MIS data.

There is lack of close integration of State GIS data with that of NREGASoft.

During the discussion on concept note of GIS MGNREGA, following points were suggested:

The application capturing the GIS data should be versatile and should be available on mobile platform.

The basic hardware requirements should be kept minimum for Data Acquisition mobile application (DAMA).

The mobile application should clearly demarcate and create Asset after the completion of work. An asset can have multiple works, the database should have the capabilities of projecting only assets in the GIS Portal in PhaseI.

There are problems of inaccessibility in remote locations, therefore DAMA should ensure that on difficult terrains also the device and application is able to capture the data and is able to upload on the offline mode.

The process flow for capturing the GIS data should be well documented and village-level training should be imparted to all concerned.

Use of open source softwares should be encouraged.

There should be uniform schemes and service oriented architecture.

For the implementation of the GIS, National, State, District and Local level GIS Team should be made.

Ultimately, linking of each GIS data should be with the FTO, so that only Geotagged photo can generate FTO

Dr. K. Mruthyunjaya Reddy, Science/Engineer SG & Head made the presentation and stated that Bhuvan Geoportal Platform has all those features, as required under GIS Implementation of MGNREGA and that they can directly support all the requirements, immediately. NRSC informed that they can have the Apps developed, as per requirements, and delivered in a matter of few days. DoLR, MoRD and Department of Post have recently used their tool for nationwide Geotagging activities in just few months. We can immediately take up the Phase 1 activity. The Server Farm of Bhuvan is already in place, which is hosting and serving Terra Bytes of data on a daily basis. It was decided that the modalities of engagement with NRSC Bhuvan proposal will be worked out by the Ministry.

Shri. Manoj Khare, Joint Director, CDAC, Pune, informed the gathering about the successful implementation of PMGSY GIS project. It was decided that more information shall be shared by CDAC with the Ministry.

Shri V. Uday Kumar, NIC, GIS Division made the presentation on the capabilities of Bharat Maps and the NIC capabilities. NIC, DoRD made the presentation about the draft mobile App schemes for the GIS Implementation of MGNREGA.

Since during the discussion it was brought out that along with technology, implementation aspects in the ground-level are very important parameter in the successful implementation of the project. It was decided to constitute a 'Course of Action' group with the following officers as attached in Annexure 2. The 'Course of Action' Group will suggest the phase rollout strategies for GIS Mahatma Gandhi NREGA & finalise the timelines and deliverables for the implementation of GIS under Mahatma Gandhi NREGA in the States. The final recommendations should be submitted by 30th April 2016.

Annexure 1

List of participants of workshop on Implementation of GIS in

MGNREGA

Venue: Unnati Hall, Krishi Bhawan, New Delhi 110001
Date of Meeting: Friday, the 08th April, 2016
Timing of Meeting:10:00 AM till 05:00 PM

Participated Members,

Shri S.M. Vijayanand, Secretary, RD

Shri Amarjeet Sinha, Additional Secretary, RD

Smt Aparajita Sarangi, Joint Secretary(RE)

Shri Kushal Pathak, Director SAGY & MGNREGA

Shri D.K. Singh, Director

Shri Prashant Kumar Mittal, Sr. Technical Director, NIC

Shri R. K. Sood, Under Secretary

Atul Kumar Singh, System Analyst

G.N. Sharma, Irrigation and Soil Engineering Expert

Shri Satish Sinha, Project Officer, UNDP

Ritesh Saxena, Project Officer, UNDP

Ashutosh Gupta, Project Officer, UNDP

Ajay Kumar, C&A Officer, UNDP

Anil Kumar Singh, Project Executive, ICT

Mukesh, Project Executive, ICT

Shri Amit Jain, Project Executive GIS, ICT

Pankaj S. Duberkar, Project Executive, ICT

Biju Abraham, Consultant, Program Officer, UNDP

Ajay Sharma, Assistant Programmer

Participated Members (States/Other Organization):

State / Other Organisation	Participant Name	Designation
Maharashtra	Shri Abhay Mahajan	Commissioner
Maharashtra	Dr. Subrato N. Das	Director
Karnataka	Shri. Munish Moudgil	Commissioner
Madhya Pradesh	Shri. Raghuraj Rajendran	Commissioner
Madhya Pradesh	Shri. Ovais Ahmed	SNO
Rajasthan	Shri. Rohit Kumar	Commissioner (EGS)

State / Other Organisation	Participant Name	Designation
Rajasthan	Sangita Jain	Assistant Engineer
Rajasthan	Shashikant Munjal	Programmer
Odisha	Shri. S. R. Pradhan	Joint Secretary (PR Dept)
Odisha	Shri. S. K. Samal	IT Specialist
Odisha	Shri. S.N.	Director PR Dept.
Jammu and Kashmir	K.K. Sidha	Additional Secretary
Jammu and Kashmir	M.A. Shah	State MIS Nodal Officer
West Bengal	Esha Sengupta	Joint Secretary
West Bengal	Atin Biswas	Capacity Building Manager
West Bengal	Shri. Rajarshi Roy	State DBA
West Benbal	Shri. Subrata Chakraborty	M&E Manager
Andhra Pradesh	Shri. Srinivas Ganti	Dy. Commissioner
Andhra Pradesh	Shri. B. Prabhu	Technical Architect (Blueforge)
Gujarat	Shri. R. J. Shah	Joint Director
Gujarat	Shri. Yogiraj	SNO
Tamil Nadu	Smt. Mahalakshmi N.	PSA, NIC
Tamil Nadu	K. Jayabalan	PSA, NIC
Tamil Nadu	S. Saraswathi	A.E.
Telangana	G. Gopala Krishna	Assistant Project Director
Telangana	Shri. M. Anjaneyulu	Programme Manager
Telangana	Shri. P. Rajesh	Assistant Consultant
Punjab	Shri. Mandeep Singh	District Coordinator
Punjab	Shri. Ravinder Pal Singh	GIS Expert
Punjab	Shri. Bikram Singh	Assistant MIS
Tripura	Shri. Amitabha Datta	IT
NIC	Shri V. Uday Kumar	Senior Technical Director
NIC	Smt. Sangeeta Bhatia	Technical Director
NIC	Shri. R. Sainath	Technical Director
NIRD	Dr. V. Madhava Rao	Advisor and Head
NIRD	T. Phanindra Kumar	Assistant Professor
CDAC	Shri. Manoj Khare	Joint Director
NRSC	Dr K Mruthyunjaya Reddy	Sci/Engr SG & Head

Annexure 2

List of members of 'Course of Action' Group that will give its input on the

GIS Implementation in the States:

Shri. Abhay Mahajan

Shri. Munish Moudgil

Shri. Raghuraj Rajendran

Shri. Srinivas Ganti

Shri. G. Gopala Krishna

Shri. Subrata Chakraborty

Shri. S.K. Samal

Shri. T. Phanindra Kumar, C-GARD, NIRD&PR

Dr. Manoj Khare, CDAC

Dr. K. Mruthyunjaya Reddy, NRSC

Shri. Uday Kumar, NICGIS

Shri. Prashant K. Mittal, NICRD

Shri. Phanindra, C-GARD, NIRD&PR

Dr. Kushal Pathak, Director (MGNREGA) will coordinate the entire exercise and ensure submission of report by 5th May, 2016.

The terms of reference of the group will be as under:

The current concept note to be simplified without any phases in the project.

Capacity Building of functionaries suggested the phase rollout strategies for GIS Mahatma Gandhi

NREGA.

Suggest minimum mobile hardware specification to ensure effective GEO tagging by State Government.

Finalise the standard operating procedure for GEO tagging at the Village-level.

Finalise the timelines and deliverables for the rollout of GIS in the States.

The working group shall submit its report by 5th May, 2016.

3. Letter on constitution of course of action group dated 22 April 2016

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

Krishi Bhawan, New Delhi
Dated: 22 April, 2016

To

1. Shri. Abhay Mahajan
2. Shri. Munish Moudgil
3. Shri. Raghuraj Rajendran
4. Shri. Srinivas Ganti
5. Shri . G. Gopala Krishna
6. Shri. Subrata Chakraborty
7. Shri. S. K. Samal
8. Shri T. Phanindra Kumar, C-GARD, NIRD
9. Dr. Manoj Khare, CDAC
10. Dr K Mruthyunjaya Reddy, NRSC
11. Shri. Uday Kumar, NIC-GIS
12. Shri Prashant K. Mittal, NIC-RD
13. Dr Kushal Pathak, Director (MGNREGA)

Subject:- Terms of reference of 'Course of Action' group to suggest forward course of action for implementation of GIS under Mahatma Gandhi NREGA.

As decided in the workshop held on 8th April 2016, a working group the name "Course of Action" has been constituted with following member,

1. Shri. Abhay Mahajan
2. Shri. Munish Moudgil
3. Shri. Raghuraj Rajendran
4. Shri. Srinivas Ganti
5. Shri . G. Gopala Krishna
6. Shri. Subrata Chakraborty
7. Shri. S. K. Samal
8. Shri T. Phanindra Kumar, C-GARD, NIRD
9. Dr. Manoj Khare, CDAC
10. Dr K Mruthyunjaya Reddy, NRSC
11. Shri. Uday Kumar, NIC-GIS
12. Shri Prashant K. Mittal, NIC-RD

The group will be anchored by Shri Phaninder Kumar, Assistant Professor, C-GARD, NIRD. The group will submit its report by 5th May, 2016 on the following

1. Suggested the phase rollout strategies for GIS Mahatma Gandhi NREGA.
2. Suggest minimum mobile hardware specification to ensure effective GEO tagging by State Government.
3. Finalizing the standard operating procedure for GEO tagging at the Village level.
4. Finalizing the timelines and deliverables for the rollout of GIS in the states.

Dr. Kushal Pathak, Director (MGNREGA) will coordinate the exercise and ensure timely submission of report.

Yours faithfully

22/4/16

(Aparajita Sarangi)
Joint Secretary (RE)

4. Recommendations for course of action group dated 5 may 2016

Report of the "Course of Action Group" On Implementation of GIS under Mahatma Gandhi NREGA

Background

Ministry of Rural Development has decided to do the Geotagging of Mahatma Gandhi NREGA assets. A concept note was circulated. Ministry held a Workshop on GIS implementation where many State Governments and Stakeholders were invited. During the course of deliberation it was decided to constitute a "Course of Action Group" with the following mandate:

Suggest the phase rollout strategies for GIS Mahatma Gandhi NREGA.

Suggest minimum mobile hardware specification to ensure effective GEO tagging by State Government.

Finalising the standard operating procedure for GEO tagging at the Village level.

Finalising the timelines and deliverables for the rollout of GIS in the States.

The Committee was constituted vide letter No. M1 7017/ 02/ 2016REIII dated 22nd April, 2016 (Annexure 1) with the following composition:

Shri. Abhay Mahajan, MGNREGA Commissioner, Maharashtra

Shri. Munish Moudgil, MGNREGA Commissioner, Karnataka

Shri. Raghuraj Rajendran, MGNREGA Commissioner, Madhya Pradesh

Shri. Srinivas Ganti, Dy. Commissioner, Andhra Pradesh

Shri. G. Gopala Krishna, Asst. Project Director, Telangana

Shri. Subrata Chakraborty, M&E Manager, West Bengal

Shri. S. K. Samal, SNO (MIS), Odisha

Shri. T. Phanindra Kumar, CGARD, NIRD&PR

Dr. Manoj Khare, C-DAC

Dr. K Mruthyunjaya Reddy, NRSC

Shri. Uday Kumar, NICGIS

Shri. Prashant K. Mittal, NICRD

Dr. Kushal Pathak, Director, MGNREGA & SAGY, MoRD

Inputs were received from committee members as follows:

States	Received Date
1. Maharashtra	30 April 2016
2. Karnataka	03 May 2016
3. Andhra Pradesh	29 April 2016
4. Telangana	03 May 2016
5. West Bengal	03 May 2016
6. Odisha	30 April 2016
7. CDAC	28 April 2016
8. NRSC	04 May 2016 and 05 May 2016
9. NICGIS	29 April 2016 and 05 May 2016
10. NICRD	29 April 2016

The committee members met to finalise the recommendations on 4th May, 2016 through video conferencing following members participated,

Shri. Abhay Mahajan, MGNREGA Commissioner, Maharashtra

Shri. Raghuraj Rajendran, MGNREGA Commissioner, Madhya Pradesh

Shri. Srinivas Ganti, Dy. Commissioner, Andhra Pradesh

Shri. G. Gopala Krishna, Asst. Project Director, Telangana

Shri. Subrata Chakraborty, M&E Manager, West Bengal

Shri. S.K. Samal, SNO (MIS), Odisha

Dr. T. Ravisankar, Group Director, NRSC

Dr. Manoj Khare, Joint Director, CDAC

Dr. Kushal Pathak, Director, MGNREGA & SAGY, MoRD

Based upon the various inputs of the committee members the recommendation of the committee are as follows:

Vision

The GIS Solution of MGNREGA should provide for increasing the visibility of work progress and showcases MGNREGA works better accountability of functionaries at various levels Enhanced transparency GIS Reports will provide more details in a view easy for monitoring and analysis General Architecture.

An interactive web GIS based management system would maintain entire information of MGNREGA assets. The system will allow users to create new data, update existing data related to assets, generate queries, spatial query such as buffer, reports, maps, etc.

This will help the Department in possessing a valuable digital database (both spatial and nonspatial) for the entire country. Properly defined customised queries will also be made available for daytoday planning and management of the MGNREGA assets.

What capabilities of MGNREGA GIS Solution should be there:

Perform multi spatial attribute queries i.e., geospatial services (WPS).

Mobile compatibility

Crowd sourcing to allow crowd sourced data through various devices

Viewing information over dedicated portals

Online editing of data: Authorised departments to be made responsible for online editing of data to shift the Asset location, if required

Integration of designated MIS data

Provision to view versioned raster data as timeseries

English and Hindi

Policy and coordination among departments. Legends for marking assets on maps may be standardised.

The GIS solution should be able to integrate existing application with the MoRDGIS mobile application by using various web services.

The GIS Solution should be capable of synchronising already captured Geo Tagged assets of various states once the GIS solution stabilise.

For GIS NREGA Mapping and GEO tagging, the input data is expected to be gathered from the NREGA website. This data is very large and the assets are in various stages of completion. To capture photographs of various stages, through phone and then to upload the same on NREGA website at proper stage would require some unique key, like the work codes of those works. The NREGASoft application should be so enabled to provide those fields to GIS server through web services.

It is to be kept in mind that the website will have to be very light considering the number of hits.

It is suggested that as the website itself will be heavy considering the multiple States and processes like demand registration , muster roll, PD generation, FTO generation need to hosted separately. There can be two programmes on the same mobile working independent of each other. This will help us in first showcasing the assets successfully. NIC Mobile Monitoring System should not be used for GIS based application for assets. NIC was of the view that they have developed DAMA, a light weight application for geo tagging purpose only. Further, NIC GIS Department is also in process of augmenting the server side resources also, which could be used for Storage and retrieval system for geo tagging of assets. Since this is workflow based application, this will help in seamless integration. This data will flow into database for visualisation purpose on GIS.

As regards to crowd sourcing and citizen centric mobile application, it need to be considered from the point of view of the fact that usually the person residing in other block is not aware of the factual and ground realities of other block of the district. However, we will not be able to bar anyone from posting remark or idea about any district. Moreover, we will have to develop a modalities to incorporate these ideas, contributions, corrections from crowd sourcing. In such scenario, it is proposed that development of CCMA should be separated from Geo tagging.

As regards to Business Intelligence tool it is felt that this is currently of not much relevance as we have a separate server for analysis and MIS. And such information can be processed elsewhere and presented in preset form as static information. Later the BI tools can be incorporated when the data matures.

It is important that we are able to follow the same protocols, formats, use similar if not same layers and GEO systems as that of other government agencies, if we are share our data with them or share their data on our website.

As BHUVAN App is already in use for IWMP and also for other programme, the same can be utilised in MGNREGA after integration.

National Cell of MGNREGA should establish coordination with National/ State Survey and mapping organisations like

Survey of India

Indian Meteorological Department

Census of India

Geological Survey of India

National Bureau of Soil Sciences & Landuse Board

Forest Survey of India

National Remote Sensing Establishment

State Remote Sensing Centers or State Space Application Centre

Survey Settlement and Land Records

Ministry of Panchayati Raj, Government of India

Research Data – publications, reports, etc.

Google/GPS – being used for updation and data capture

During the implementation, following milestones should be incorporated into various phases of development cycle:

Requirement analysis,

Development of mobile application suite and testing of application for a week,

Incorporating suggestions from MGNREGS and creating updated versions of mobile Apps,

Capacity building of NREGA officials by way of conducting workshops,

Mapping of ongoing or yet to start works from financial year 201617,

GIS data creation for mapped assets,

Development of Website for asset visualisation using Internet,

Incorporating suggestions from MGNREGS and updating website accordingly,

Distribution of mobile App and supplementary material,

Creation and distribution of User Guidelines and Operating Manuals,

Integration of NIC MIS Databases with GIS system for few fields as needed,

Integration of NIC MIS Databases with GIS system for requisite master tables,

Development of advance GIS Analysis, Queries, and Report Generation,

Citizen Centric Mobile Application Development,

Citizen Centric services Development.

Process Flow

Governance Structure:

The process of capturing of data should be simple and should only involve three levels of responsibilities.

Level 1: There will be designated MGNREGA Spatial Enumerator (MSE) for each Gram Panchayat who will capture the Asset Photographs with GPS of completed assets. This person will be designated by the respective State Government. The completed assets means scheme completed in 201617 onwards. Provision to be made available for tagging multiple MSE under one GP. Tagging to be made location-wise (village) so that MSE get the list of completed works pertaining to that locationwise.

Level 2: State shall designate one officer above MSE as GIS Asset Supervisor (GAS) whose role would be to validate and approve the asset photograph.

Coordination level 1: Each District should designate District GIS Nodal Officer (DGNO) who will be responsible for coordination of issues relating to the District.

Coordination Level 2: Each State will nominate State GIS Nodal officer (SGNO) under commissioner MGNREGA who will be responsible for coordination and rollout. All issues pertaining to geo coordinates, assets mapping and picture validation of State level will be rectified at this level. For this purpose setup Image Quality Control and Verification Cell (QCV) who will directly coordinate with the GIS server team.

Data flow

There may be provision for one device per GP. Number of mobiles to large GPs may be increased by the States. SIM card with GPRS activated for internet connectivity per mobile phone should be available. The State may decide on the data plan to incentivise the MSE.

The App may be linked to NREGASoft (www.nrega.nic.in) to support data capturing from the central database. Only those work marked as complete under NREGASoft data should be pushed to the GIS database along with the various attributes.

However in future phases, the ongoing works will also be brought in GIS database for better progress monitoring and planning location for new works.

The information relating to work completion that will be shared by the NREGAsoft will contain the unique KYC location identifier along with work ID and other relevant information to be published like work type, start date, expenditure, total number of PDs generated, completion date, etc.

The GIS Server and NREGASoft database should do the handshake to ensure data consistency.

To authenticate the user, tagging of IMEI number & Phone number should be done by the GIS Server implementation partner and after registration an SMS with URLs to download the mobile App should be provided in a simple manner to MSE. The GIS web site will allow the State MIS coordinators to register the State functionaries for uploading the photographs.

Upon authentication, once the work code assigned during data entry relating to a scheme is entered in the App, the MSE will have the provision of entering the latitude and longitude of the worksite obtained through GPS. The MGNREGA Geospatial Enumerator (MSE) shall have option to mark the asset as new asset or tag it to an existing asset in that location. The asset ID will be maintained only at the GIS Server level. There should not be any manual intervention for entering Latitude and Longitude data. Manual entry increases the chances of error and manipulation. Schemes will not be entered through App, it is being only entered through NREGASoft.

There should not be any manual intervention for entering Latitude and Longitude data. Manual entry increases the chances of error and manipulation.

The minimum size of image to be uploaded for Geo tagging should be 640 x 480 pixels.

Once the work is marked as finished /completed in the NREGASoft database, the asset should be geo tagged within 45 days.

If there is connectivity at the worksite, the geotagged picture obtained by the device will immediately be uploaded on the GIS Server; if connectivity is an issue there can be provision of offline and delayed transmission of data from mobile device to the server. This will help reduce the sizing and help speedy uploads. Even if connectivity exist, it is taking too much time to upload photos, it may be due to so many network issues, hence a provision of Send later option, which will save it to draft and all assets that mapped may be sent all later.

App should take care of the reduction of the geotagged photo to its minimum resolution needed for uploading.

There should be a threshold to the number of photos that can be stored in the phone during connectivity issue. After only uploading the already stored photos, new photos can be captured.

The Data will be stored with proper indexing based on State, Districts, etc. These workcodes would have to be collated with the geotagged photographs so that when populated on website, they show specific work at specific place. Geotagged photographs may be watermarked or stamped with minimal information like date: time, sender name, workname / workcode details, etc. The GIS Implementation partner should ensure this.

Even the State-level officers and the Central officers can be given option to upload the photographs on their visit to assets, provided they download the APKs. This functionality can be part of CCMA and can be taken up for development independently.

Other details

The Geo tagging may be linked to pay order generation. The Ministry may look into it once the geo-tagging stabilises.

The portal should be able to create a Gallery of geo tagged images and create geo boards and pass it on to the location based information services.

The functionality of the application should be tested by a team of technology specialist nominated by the MoRD during training

Hardware

Based upon the experience of various State Governments during the implementation of GIS solution in their State the following minimum mobile device hardware specifications is suggested. These specifications should be subjected to the requirements of mobile application to be deployed to ensure matching of specification to that of requirement

CPU	1.3 GHz
OS	Android 4.4
Display	TFT capacitive touch screen 3.5"
Connectivity	GPRS, GPS and AGPS, WiFi
3G enabled	Yes
Rear Camera	5 MP
RAM	2 GB RAM
Internal memory External Storage compatibility	8 GB 16 GB

Function of the Application

User management including user profile and role, mobile phone registration with International Mobile Station Equipment Identity (IMEI) number, SIM number, etc.

Master data management like Districts, Blocks, GPs, category of Assets, etc.

MIS report on mobile as well as on web application.

Map viewing facility on phone and web application for users at different level.

Integration with other mobile based applications of the department (mAsset), Mobile Application of Rural Housing and other State specific applications).

Enabling Web Map Service (WMS), Web Map Tile Service (WMTS), Web Processing Service (WPS), Web Catalogue Service (CSW).

Enabling map view, product catalogue/ metadata Catalogue Service on Web (CSW), services specific service/ feature data sets Web Feature Service (WFS), simple applications (Query based decision support), coverage services/ images Web Coverage Service (WCS), search and discovery, help/support.

The GIS application should have the capability of taking inputs from the various mobile devices and should also be able to share the data for publication on to various server. It should allow for easy integration of various other applications like CCMA, BI tools, catalogue servers on to it.

Rollout Strategy

Phase 0: During this phase, States will identify various functionaries, set-up implementation structure and identify one Districts which will be called as GIS Pioneering District (GPD). The GDP district should be such which already had implemented GIS based solution for other Government programmes so that rollout is faster and not dependent on procurements of mobile devices. The GIS implementation partner will develop the solution, mobile Apps, NIC will develop the web services to push the data on GIS Server. The mobile devices will be provided to the GPD Gram Panchayats and training will be imparted by GIS Implementation partner to the GPD's functionaries. This phase will be completed within 3 months.

Phase I: This phase will be pilot rollout. In this phase, the mobile application will be introduced and various testing, and improvement on software and processes will be tested and implemented in the GPD districts. During this phase, preparation for roll out of solution in all other districts will be undertaken including mobile device procurement and training. This phase will end by 6 months from start of the project.

Phase II: After the successful implementation of Phase I, the solution will be rolled out in all States in the remaining Districts.

There should regional/state-wise training/workshop on the GIS project conducted by MoRD GIS Team.

[ELECTRONICALLY SIGNED]

(Prashant K. Mittal)   (Uday Kumar)   (Dr. K M Reddy)

(Dr. Manoj Khare)   (T. Phanindra Kumar)   (S. K. Samal)

(Subrata Chakraborty)   (G. Gopala Krishna)   (Srinivas Ganti)

(Raghuraj Rajendran)   (Munish Moudgil)   (Dr. Kushal Pathak)

(Abhay Mahajan)

5. Meeting notice on implementation of GIS dated 27 may 2016

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Ministry of Rural Development
Department of Rural Development
MGNREGA Division

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Krishi Bhawan, New Delhi
Dated: 27th May, 2016

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To

1. **Shri A. S. Kiran Kumar**, Secretary, Department of Space
2. **Shri. Arun Sharma**, Secretary, DeitY
3. **Ms. Neeta Verma**, Director General, NIC
4. **Dr. W. R. Reddy**, Director General, NIRD & PR

Subject:- Meeting on implementation of GIS for Mahatma Gandhi NREGA on 30th May, 2016 at 02:00 pm, in Unatti Hall, Krishi Bhawan.

Dear Sir,

The Ministry of Rural development is planning for implementation of centralised Geographical Information System (GIS) for Mahatma Gandhi NREGA in which, approximately 30 lakh assets are created annually. Ministry of Rural Development proposes to use GIS solutions to visualize, analyze and explore such asset related data and also manage them more effectively along with better understanding of the outcomes.

National Remote Sensing Centre (NRSC) has shown keen interest in the implementation of GIS in Mahatma Gandhi NREGA through their Bhuvan platform by closely integrating with the Mahatma Gandhi NREGA software application. However, the implementation of this project requires tremendous coordinated action between concerned organizations. Accordingly a meeting has been called under the chairmanship of Secretary, Rural Development to discuss the implementation of GIS in Mahatma Gandhi NREGA.

You are therefore requested to kindly attend a **meeting scheduled for 30th May, 2016 at 02:00 pm, at Unatti Hall, Krishi Bhawan**. You are also requested to be accompanied by concerned officials/agencies.

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Yours faithfully

(Dr. Kushal Pathak)
Director (MGNREGA)
Email: Kushal@nic.in
Mobile:913-677-7000

</div>

Copy to:-
1. PPS to Secretary, Rural Development
2. PPS to Additional Secretary, Rural Development
3. PS to Joint Secretary (RE)
4. Director, National Remote Sensing Centre (NRSC)

6. letter of acceptance to NIC dated 6 June 2016

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

Krishi Bhawan, New Delhi
Dated: 06th June, 2016

To

Ms. Neeta Verma,
Director General,
National Informatics Centre (NIC),
New Delhi.

Subject:- GIS Implementation of Mahatma Gandhi NREGA assets through Bhuvan platform

Dear Madam,

The Ministry of Rural development is planning to implement centralised Geographical Information System (GIS) for Mahatma Gandhi NREGA in which, approximately 30 lakh assets are created annually.

Subsequent to the meeting held on 30 May, 2016 chaired by Secretary, Rural development, it has been decided that Geo-tagging of MGNREGA Asset will be done on a turn-key basis by National Remote Sensing Centre, Department of Space. Only Bhuvan Mobile app and Bhuvan Geoportal will be used as one simple integrated solution for MGNREGA GIS Solution.

NIC will play vital role in successful implementation of Geo-tagging of Mahatma Gandhi NREGA asset. The NREGASoft application managed and hosted by dedicated team of NIC, will have to be integrated with the Bhuvan platform by providing necessary data on a real-time basis.

We solicit your cooperation for successful implementation of the project.

This issues with the approval of Secretary, Rural Development.

Yours faithfully

(Aparajita Sarangi)
Joint Secretary (MGNREGA)

Copy To:

1. Shri D.C. Mishra, Deputy Director General, National Informatics Centre (NIC)
2. Shri. Prashant Kumar Mittal, Senior Technical Director, National Informatics Centre (NIC)

7. LOA to NRSC dated 6 June 2016

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

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Krishi Bhawan, New Delhi
Dated: June, 2016

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To
Shri A. S. Kiran Kumar,
Secretary,
Department of Space

Subject:- GIS Implementation of Mahatma Gandhi NREGA assets through Bhuvan platform.
Reference:- Your office communication dated 13-03-2016, 03-05-2016, 04-05-2016 and 05-05-2016

Sir,

The Ministry of Rural development is planning to implement centralised Geographical Information System (GIS) for Mahatma Gandhi NREGA in which, approximately 30 lakh assets are created annually.

Given the multitude of GIS related capacity of Department of Space the Ministry of Rural Development proposes to use NRSC's Bhuvan platform to visualize, analyze and explore such asset related data. This would envisage not only more effective management of data, but also integrate them with data of various Ministries.

We would, therefore request you to kindly take up Phase-I of GIS implementation of Mahatma Gandhi NREGA with immediate effect using Bhuvan mobile and web platform on a turn-key basis. The scope of work is enclosed for your kind perusal.

The support of Department of Space is highly solicited.

Encls: As above

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Yours faithfully

(Aparajita Sarangi)
Joint Secretary (MGNREGA)

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Copy To:
  1. Dr. Vinay Kumar Dadhwal, Director, National Remote Sensing Centre (NRSC)
  2. Dr. V. Madhav Rao, Advisor & Head, Centre for Geo-informatic Applications in Rural Development (CGARD), NIRD
  3. Shri. Prashant Kumar Mittal, Senior Technical Director, National Informatics Centre (NIC)

Scope of work

Phase I

Mobile based Geo-tagging of approximately 30 lakhs assets annually along with photographs is created under Mahatma Gandhi NREGA w.e.f 1st April 2016.

- **Completed Assets** from NREGASoft along with work details will be pushed to Bhuvan platform through web services.

- Through **Bhuvan Mobile Platform**,completed asset will be Geo-tagged along with photograph by Gram Rojgar Sahayak/Technical Assistant/Junior Engineer

- After validation by Programme Officer at the Block level, assets will be **available in the Bhuvan Platform / State Portals.**

  Roles:

  – *Department of Space (DoS) for Mobile Application & Bhuvan Platform*
  – *NIC for IT solution to push MGNREGA data to Bhuvan platform*

Phase II

- **Citizen-centric Mobile Application** for crowd-sourcing of information to create visibility and feedback mechanism to strengthen social audit mechanism.

  Roles:

  – *NIRD&PR to develop application for citizens*
  – *DoS/ NRSC: Integration of Citizen-centric application with Bhuvan*

- This phase will expand the GIS Application with comprehensive Geoprocessing of MGNREGA works by **covering all stages of MGNREGA** from initiation of work, muster roll, measurement of work to closure of work for better monitoring of MGNREGA functionaries performance and creation of assets, better tracking and better reporting of location-specific events through time and location stamping to improve the bottom line. This will integrate textual and spatial records and help in easy verifications of contours and boundaries of MGNREGA asset to perform various Spatial correlation and MIS functions.

  Roles:

  – *NIC & DoS / NRSC*

PhaseI II

- **Publish e-Government Interoperability Frameworks** to create single window-access to spatial / non spatial data for full integration of geospatial data with various existing databases of Government.

- Creation of **Common Asset Register** at Panchayat level consisting of assets from all Ministries

- Integration of GIS Asset data with Decision Support System for **integrated National Resource Planning** at District level.

  Roles:

  - Deity, DoS & NIC

State Level Rollout Strategy

- In phase - I, one district from each State will be designated as GIS Pioneer District (GPD) where GIS will be tested and implemented. A total of 34 district will be part of Phase-I.

- All remaining 627 District will be covered under GIS after successful implementation in phase-I districts.

Functionaries

a. Level 1: There will be designated MGNREGA Spatial Enumerator (MSEs) for each Gram Panchayat who will capture the Asset Photographs with GPS of completed assets. The Gram Rojgar Sahayak (GRS)/ Techical Assistant (TAs) will be designated by the respective State Government based upon the local conditions and requirements. There can be multiple MSEs under one GP.

b. Level 2: State shall designate one officer above GRS/ TA as GIS Asset Supervisor whose role would be to validate and approve the asset photograph. The Programme Officer (PO) or any other concerned Officer at the Block-level will be designated by the respective State Government based upon the local conditions and requirements, usually Programme Officer.

c. Coordination level 1: State should designate District GIS Nodal Officer (DGNOs) for each district. DGNO will be responsible for coordination of issues relating to the District.

d. Coordination Level 2: Each State will immediately nominate State GIS Nodal Officer (SGNO) under Commissioner MGNREGA who will be responsible for coordination and rollout. All issues pertaining to geo coordinates, assets mapping and picture validation of State level will be rectified at this level.

Training Implementation plan

a. In Phase- I, 2 Gram Rojgar Sahayak (GRS)/ Technical Assistant (TA) and two Programme Officers/ Block-level designated Officer from each Block of the GIS Pioneer Districts (GPDs), District GIS Nodal Officer of GPDs and the State GIS Nodal Officers of the States will be imparted training by Ministry of Rural Department at various regional centres in areas of Work Completion, Asset Creation, usage of Mobile App for Geo-tagging, Validation of Geotagging and Usage of GIS Portal.

b. The training for Phase-II will be imparted by respective States. The resources of GPDs may be utilised by the States to train the GRSs/ TAs, POs/ Block Level Officers, DGNOs of other districts.

c. C-GARD, NIRD&PR will provide short term and long term opportunities in skills development in the form of regular academic programmes, seminars, workshops and open house presentations and Exhibitions for GIS implementation of Mahatma Gandhi NREGA.

d. National Remote Sensing Corporation (NRSC) will provide training on customised mobile App, use of Bhuvan portal, etc., and arrange periodic product demonstrations, familiarisation with qualities and standards of the products.

e. MoRD will also undertake user interaction and stakeholders symposia at regular (annual / biannual) intervals for promotion of openness and transparency in implementation and operations.
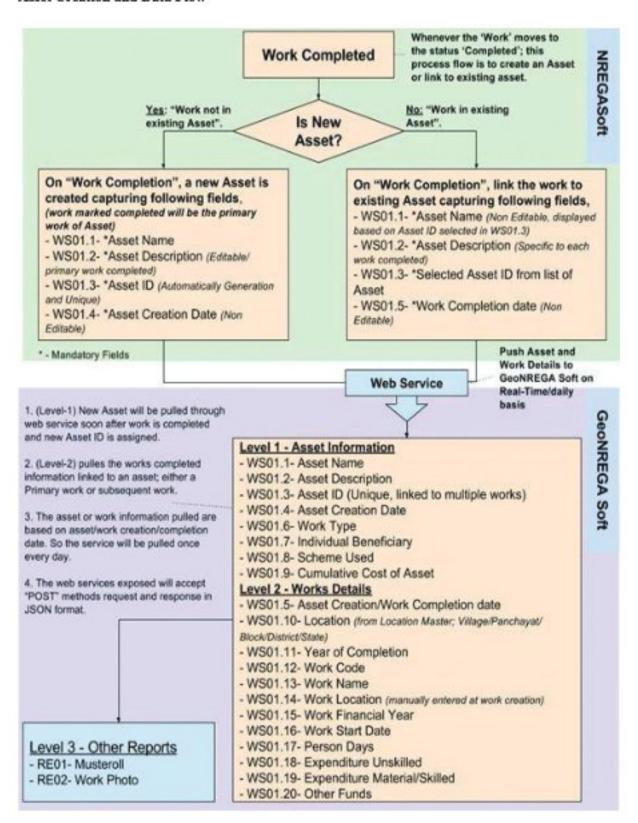
Roles and Responsibilities

S.No.	Work	Responsibillity	Timelines(T)*
1	Web services to modify database and push relevant data from NREGASoft to Bhuvan server	NIC	T+ 2 weeks
2	Modification of Bhuvan Mobile Apps and setting up of Bhuvan Portal	NRSC	T+4 weeks
3	Budget allocation for mobile hardware procurement to all States, setting up of PMU and training of functionaries	MoRD	T+4 weeks
4	Identification of various functionaries, set-up implementation structure and identify one District which will be called as GIS Pioneering District (GPD).	States	T+ 4 weeks
5	Setting up of PMU and training and capacity building of GPD functionaries	NIRD&PR C-GARD	T+ 12 Weeks
6	Testing and pilot rollout in the GPD districts.	MoRD	T+13 Weeks
7	Rollout of Phase-I in the GPD District	States	T+15 weeks
8	Rollout of solution in all other districts of all States will be undertaken including mobile device procurement and training.	States	T+20 weeks

* T is the Kickoff date

Timelines

Items	Dates
Design of Mobile App and GIS Solution	30th June 2016
Training in GPD Districts	1st July to 30th August 2016
Testing and Pilot in GPD Districts	1st September 2016
Launch in GPD Districts	15th September 2016
Training in Other Districts	1st September to 30th October 2016
Launch in Other Districts	1st November 2016

Asset Creation and Data Flow

NREGASoft

Work Completed

Whenever the 'Work' moves to the status 'Completed'; this process flow is to create an Asset or link to existing asset.

Is New Asset?

Yes: "Work not in existing Asset".

No: "Work in existing Asset".

On "Work Completion", a new Asset is created capturing following fields, *(work marked completed will be the primary work of Asset)*
- WS01.1- *Asset Name
- WS01.2- *Asset Description *(Editable/ primary work completed)*
- WS01.3- *Asset ID *(Automatically Generation and Unique)*
- WS01.4- *Asset Creation Date *(Non Editable)*

* - Mandatory Fields

On "Work Completion", link the work to existing Asset capturing following fields,
- WS01.1- *Asset Name *(Non Editable, displayed based on Asset ID selected in WS01.3)*
- WS01.2- *Asset Description *(Specific to each work completed)*
- WS01.3- *Selected Asset ID from list of Asset
- WS01.5- *Work Completion date *(Non Editable)*

Push Asset and Work Details to GeoNREGA Soft on Real-Time/daily basis

Web Service

GeoNREGA Soft

1. (Level-1) New Asset will be pulled through web service soon after work is completed and new Asset ID is assigned.

2. (Level-2) pulles the works completed information linked to an asset; either a Primary work or subsequent work.

3. The asset or work information pulled are based on asset/work creation/completion date. So the service will be pulled once every day.

4. The web services exposed will accept "POST" methods request and response in JSON format.

Level 1 - Asset Information
- WS01.1- Asset Name
- WS01.2- Asset Description
- WS01.3- Asset ID (Unique, linked to multiple works)
- WS01.4- Asset Creation Date
- WS01.6- Work Type
- WS01.7- Individual Beneficiary
- WS01.8- Scheme Used
- WS01.9- Cumulative Cost of Asset

Level 2 - Works Details
- WS01.5- Asset Creation/Work Completion date
- WS01.10- Location *(from Location Master; Village/Panchayat/ Block/District/State)*
- WS01.11- Year of Completion
- WS01.12- Work Code
- WS01.13- Work Name
- WS01.14- Work Location *(manually entered at work creation)*
- WS01.15- Work Financial Year
- WS01.16- Work Start Date
- WS01.17- Person Days
- WS01.18- Expenditure Unskilled
- WS01.19- Expenditure Material/Skilled
- WS01.20- Other Funds

Level 3 - Other Reports
- RE01- Musteroll
- RE02- Work Photo

8. SRD invitation to DeiT Secretary dated 22 June 2016

जितेन्द्र शंकर माथुर
JITENDRA SHANKAR MATHUR

सचिव
भारत सरकार
ग्रामीण विकास मंत्रालय
ग्रामीण विकास विभाग
कृषि भवन, नई दिल्ली-110001
SECRETARY
Government of India
Ministry of Rural Development
Department of Rural Development
Krishi Bhawan, New Delhi- 110001
Tel: 91-11-23382230, 23384467
Fax: 91-11-23382408
e-Mail: secyrd@nic.in

DO # M-11011/02/2016-RE-III   22nd June, 2016

Dear Ms Sharma.

The Ministry of Rural Development has decided to implement the Geographic Information System under Mahatma Gandhi National Rural Employment Guarantee Act. Under the programme, on an average, 30 Lakh assests are created annually, across the country which will be geotagged. Technological interventions are planned in terms of using mobile based geotagging and a GIS based information system.

2.   Ministry of Rural Development has assigned GIS implementation of Mahatma Gandhi NREGA using Bhuvan mobile and web platform on a turnkey basis to NRSC. The Ministry is signing a Memorandum of Understanding with NRSC, ISRO, Department of Space for the same. It is envisaged, through this MOU, that specific geospatial solutions for both Mahatma Gandhi NREGA scheme of Ministry of Rural Development (MoRD) and assets created under 14th Finance Commission grants will be captured through a mobile application.

3.   This MoU will lay foundation for Citizen centric Mobile Application for visibility and feedback mechanism to strengthen social audit mechanism, create single window-access to spatial/non spatial data for full integration of geospatial data with various existing databases of Government.

4.   You are cordially invited to grace the occasion of signing of the MOU on 24th June, 2015 at 3.30 PM at the Ministry of Rural Development, Krishi Bhawan, New Delhi. A copy of the agenda is attached for your information.

5.   In this endeavour, your Ministry can play a vital role integrating various Geospatial data to provide an integrated view of Rural Assets. Your kind support is solicited.

Secretary RD
e-FMS No.175077
Despatch No.17946
Date

With Regards.

Yours sincerely,

[Jitendra Shankar Mathur]

Dr Aruna Sharma
Secretary
Department of Electronics & Information Technology
Electronics Niketan
6, CGO Complex, Lodhi Road
New Delhi - 110003

Agenda
GIS IMPLEMENTATION OF MGNREGA

Signing of Memorandum of Understanding
between
Department of Rural Development,
Ministry of Rural Development, New Delhi
&
National Remote Sensing Centre, Hyderabad
Indian Space Research Organisation
Department of Space

Time: 24th June, 2016 at 3:30 PM Venue: Unnati Hall, Krishi Bhawan, New Delhi

Welcome by JS (RF) on the Project Overview	3.30 p.m. to 3.35 p.m.
Presentation by NRSC on the implementation	3.35 p.m. to 3.50 p.m.
Address by Additional Secretary Rural Development	3.50 p.m. to 3.55 p.m.
Address by Chairman ISRO	3.55 p.m. to 4.00 p.m.
Address by Secretary Rural Development	4.00 p.m. to 4.05 p.m.
Signing of MoU	4.05 p.m.
Vote of Thanks	4.10 p.m.

9. MOU on GIS implementation of MGNREGA signed 24 June 2016

Memorandum of Understanding

for

GIS Implementation of Mahatma Gandhi NREGA Assets

between

Department of Rural Development, Ministry of Rural Development, New Delhi

And

**National Remote Sensing Centre
Indian Space Research Organisation
Department of Space, Government of India,
Hyderabad - 500037**

Signed on this day 24th June, Year 2016

**Joint Secretary
Department of Rural Development**

**Deputy Director
National Remote Sensing Centre**

1. Preamble

The Ministry of Rural Development is planning to implement a Geographic Information System for implementation of Mahatma Gandhi National Rural Employment Guarantee Act. Under the programme, on an average, 30 Lakh assets are created annually, across the country. Keeping in view the recent thrust of the Ministry on creation of assets under Mahatma Gandhi NREGA, through convergence with other schemes, the geo-tagging of such assets (with convergence) also need to be ensured. Considering the recent thrust on systematic creation of database on assets, technological interventions are planned in terms of using mobile based geotagging and a GIS based information system. The MoU addresses specific components of geo-tagging the assets and creation of database for online recording and monitoring.

NIC-DoRD has already taken initiatives to ensure that necessary linkages of IT usage under the project are enabled for initial database creation. A project level MIS is developed to provide the required tools for basic data capture on beneficiaries and asset details (NREGAsoft). This has already been used in various States in recording required details. This software serves as an important base data for geotagging assets and building GIS based tools.

NRSC, ISRO, Department of Space caters to various geospatial data and solutions, at national level, with specific focus on satellite data acquisition, applications development and providing customized solutions to various national level projects. NRSC has a well-demonstrated platform "Bhuvan Geoportal" to support such programs. Bhuvan is a open source Web GIS platform that has diverse capabilities of using online GIS facilities for developmental planning and monitoring of national level projects. This platform has already hosted customized GIS software solutions and large amount of data for many Government programs/ projects that are operationally used. Extensive use of satellite images, diversified thematic digital maps, mobile tools for field data capture and a host of GIS tools for image/map display, analysis and online report generation are some of the highlights. It is envisaged, through this MOU, to customize specific geospatial solutions for both Mahatma Gandhi NREGA scheme of Ministry of Rural Development (MoRD) and assets created under 14th Finance Commission grants.

2. Parties involved in MOU

i. **First Party:** Department of Rural Development, Ministry of Rural Development, New Delhi, hereafter referred to as First Party, is the **Indenting Party.**

ii. **Second Party:** National Remote Sensing Centre (NRSC), Indian Space Research Organisation, Dept. of Space. Govt. of India, hereafter referred to as second party, is the **Executing Party.**

3. Authorised Signatories

i. Joint Secretary, MGNREGA, Department of Rural Development, Ministry of Rural Development, MoRD, New Delhi

ii. Deputy Director, Remote Sensing Application Area, National Remote Sensing Centre, Indian Space Research Organisation, Hyderabad

4. Date of signing, Effective date and duration of MoU

i. **Date of signing**: 24th June, 2016

ii. **Effective date**: 24th June, 2016

iii. **Duration of MoU**: 24 months

5. Functionaries

5.1 Ministry of Rural Development

Sl. No	Name	Contact Address	Phone	Email
1	Dr. Kushal Pathak	Director (MGNREGA) Krishi Bhawan, New Delhi, 110001	011-23384541	kushal@nic.in
2	Shri. Rajesh Kanaujia	Under Secretary, MoRD Krishi Bhawan, New Delhi, 110001	011-23383670	saanihirkk@gmail.com
3	Shri. Prashant K. Mittal	Senior Technical Director Krishi Bhawan, New Delhi, 110001	011-23097055	pk.mittal@nic.in

5.2 National Remote Sensing Centre

Sl. No	Name	Contact Address	Phone	Email
1	Dr.T Ravisankar	Group Director LRUMG, RSA, NRSC, ISRO Balanagar, Hyderabad 500037	040-23884214	ravisankar_t@nrsc.gov.in
2	Dr K.M. Reddy	Head, Rural Development & Watershed Monitoring	040-23884555	reddy_km@nrsc.gov.in

Sl. No	Name	Contact Address	Phone	Email
		Division(RDWMD), LRUMG, RSA,		
3	Shri.M.V.Ravi Kumar	Group Head ASD & CIG, RSA,	040-23884228	ravikumar_mv@nrsc.gov.in
3	Mr Arul Raj	Manager, Bhuvan Web Services Development	040-23384589	arulraj_m@nrsc.gov.in

6. Scope of work

6.1 Implementation of Geospatial solutions: This will be carried out in a phased manner with a focus on

a) Enabling software solution on Android Mobile for geo-tagging of completed assets

b) Building necessary interface on Bhuvan platform to receive Mobile geotagged data

c) Provide facility for moderation/ validation and display of assets (photo and attributes)

d) Build required interface with existing software / MIS, developed by NIC-DORD, that is already being used by the project for assets data creation

The implementation covers geo-tagging of assets (approximate annual average of 30 Lakh assets) along with photographs, created under Mahatma Gandhi NREGA with effect from April 1st, 2016 using an Android Mobile App.

Following activities will also be planned and implemented:

- Information on Assets, identified as completed by state authority, residing on NREGASoft, along with work details will be pushed to Bhuvan Platform on regular basis as part of operational mechanism.

- Through Bhuvan Mobile Platform, completed asset will be Geo-tagged along with photograph by Gram Rozgar Sahayak/Technical Assistant/Junior Engineer.

- After moderation/ validation by Programme Officer at the Block level, the assets will be displayed on Bhuvan Web Platform in public domain. Towards this a moderation interface will be provided on Bhuvan Platform for respective level of functionaries.

- NRSC, ISRO will provide geospatial solutions through Android Mobile App and Bhuvan Geospatial Platform

- NIC-DORD will work in close coordination with NRSC, ISRO for IT solutions and building necessary interfaces to push MGNREGA data to Bhuvan platform in a sustained manner

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7. Methodology

Following are the brief steps to be adopted in the implementation of GIS under Mahatma Gandhi NREGA:

7.1 Bhuvan-MGNREGA Geo-portal

- National level geospatial framework will be implemented with geospatial information compatible to industry and open source database standards

- Geo-portal will be accessible to DoRD, Ministry of Rural Development and States for monitoring and database creation respectively. State wise access will be provided to respective State and District level Nodal offices including privileges for moderation of geo-tagged assets.

- Standard web based mechanism will be put in place to consume assets data pushed from the software developed by NIC-DORD, NREGASoft.

- Operating procedure will be established to enable a smooth exchange of data as services between NIC-DoRD and Bhuvan geoportal, while ensuring data integrity and security

7.2 Android Mobile Application

- Asset / Work ID based Mobile App will be designed and implemented to geo-tag the completed assets from the field.

- The mobile app will make use of data and services from Bhuvan platform to guide the Gram Rozgar Sahayak/Technical Assistant/Junior Engineer in collection of assets data.

7.3 Capacity Building and training

- NRSC will prepare User Manuals, as required, under the program

- Training of Trainers (TOTs) will be done by NRSC for identified teams.

- TOTs will further help in providing field level training, as required by DORD

- Training will be imparted on
    - i. Customised Mobile Application
    - ii. Use of Bhuvan-MGNREGA geoportal
    - iii. Moderation/Validation of the uploaded photographs
    - iv. Exposure to the use of satellite images & geoportal

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8. Roles and Responsibilities

8.1 NRSC, ISRO

- An exclusive Bhuvan–MGNREGA Geo-portal for DoRD will be developed and deployed, with geotagged assets data and report generating tools.

- A customized Android Mobile App for geo-tagging of completed assets will be developed and provided for field level usage.

- Standard Operating Procedure (SOP) will be provided by Bhuvan, in consultation with NIC-DoRD and DoRD for Moderation/ Validation of Geotagged content on the Bhuvan platform

- Work towards realization of an operational interface for exchange of data / services with NIC-DoRD with regard to the MGNREGA and 14th Finance Commission requirements.

- Preparation of User Manuals and imparting training for TOT participants.

8.2 DoRD

- DoRD will provide specific requirements of the project to realise Bhuvan-MGNREGA Geo-portal

- Facilitate the integration of NREGASoft data with Bhuvan geoportal, including sustained flow to Bhuvan

- Coordination with State Agencies for required Data Flow including moderation and capacity building

- Resolve issues with regard to Data Quality, with stakeholders, from time to time.

8.3 NIC- DoRD

DORD is the nodal organization / focal point for interaction with NIC for the following activities:

- Provide initial data dump of all work-ids and corresponding names

- Ensure Data Push from NREGASoft to Bhuvan-MGNREGA on a regular basis, as required by the project

- Enable smooth data services between NIC-DoRD and Bhuvan including data logging for completeness and trigger for incomplete transaction

- Provide necessary requirements for formulation of Mobile App, as required by MORD

Page 6 of 10

- Provide services of the Administrative units (state, district, block, panchayat, village) year-wise, for mapping the assets

- Provide service covering location codes including Unicode representation of local place names

- Provide list of Work Categories, Sub Categories, Work Type and Asset Details

- Provide asset IDs in NREGASoft for all completed assets.

- Share the user database comprising of role (spatial enumerator or moderator), credentials, user ID, area of responsibility, mobile number, IMEI number of device, for mapping the assets.

- Share the domain and sub domain relations

9. **Technical specifications: N.A.**

10. **Applicable documents N.A.**

11. **Guidelines on data and map security:**

    Applicable National policies on Map & image

12. **Project schedule**

    The project is proposed to be executed in T+20 weeks. However, MoU is valid for two years from the date of signing.

13. **Schedule of supply, installation & acceptance test: N.A.**

14. **Schedule of prices - N.A.**

15. **Funding: N.A.**

16. **Terms and condition of payment: N.A.**

17. **Project monitoring**

    The project will be jointly monitored by Joint Secretary, MGNREGA, Ministry of Rural development and Deputy Director, RSA, NRSC with relevant officials drawn from NRSC, ISRO, NIC-DORD and DoRD.

18. **Confidentiality**

    Both the collaborating agencies will maintain utmost confidentiality, as applicable, with respect to data sharing and Government policy. During the tenure of the agreement and thereafter, both partners undertake on their behalf and on behalf of their employees/ representatives to maintain strict confidentiality and prevent disclosure thereof of all the information and data exchanged/ generated pertaining to this agreement, as per Government

Page 7 of 10

policies. However, the data can be published and shared jointly for scientific publication with mutual consent of both the parties. The data shall be uploaded on to the Bhuvan, NRSC, ISRO's geo-portal, in public domain for visualization, as per the requirements of MORD and the data will be made available and shared for publishing on other Central government and State Government geo-portals.

19. Intellectual property rights

Original data, derived data, methodology adopted, documents generated etc., in the project are the joint property of NRSC/ISRO and MoRD and shall be used in further scientific study or for any other purpose with mutual consent.

20. Change in scope of work

Any change in scope of work would be with mutual consent of both parties in writing.

21. Modifications to MOU

Modifications to the MOU, if required will be done with mutual consent of both the parties and the same is applicable to amendment of this agreement. The modification / changes shall be effective from the date on which they are made, unless otherwise agreed to.

22. Force majeure

Neither party shall be held responsible for non-fulfillment of their respective obligation under the agreement due to exigency of one or more of the unforeseen events such as but not limited to Acts of God, war, flood, earthquake, cyclones, strikes, lockouts, epidemics, riots, civil commotion etc. provided on the occurrence and cessation of such events, they effected thereby shall give notice in writing to other party within one month of such occurrence or cessation. If the force-majeure conditions continue beyond six months, the parties shall then mutually decide about the future course of action.

23. Indemnity

Either Party ("Indemnifying Party") shall indemnify and keep indemnified the other Party ("Indemnified Party") against any and all claims, direct losses, injuries, liabilities, reasonable costs and expenses, direct damages, actions or proceedings which may be made or taken against the Indemnified Party by any person arising out of any breach, action or inaction of the Indemnifying Party under this agreement. In no event whatsoever, the Indemnifying Party shall be liable to the Indemnified Party for any loss of revenue, loss of profits, rights or services, incidental, indirect or consequential damages arising from or related to this agreement

Page 8 of 10

24. Arbitration

In the event of any dispute or difference between the parties hereto, such disputes or differences shall be resolved amicably by mutual consultation. If such resolution is not possible, then unresolved dispute or differences shall be referred for arbitration by the arbitrators, to be appointed by the Secretary, Rural Development Department, Government of India. The provisions of Arbitration & Conciliation Act, 1996 (No. 26 of 1996) shall not be applicable to the Arbitration. The venue of such arbitration shall be at New Delhi or any other place as may be decided by the arbitrator. The language of arbitration proceedings shall be English. The arbitrator shall make a reasoned award (the "Award"), which shall be final and binding on the parties. However, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or Special Secretary/Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the parties finally and conclusively. The cost of the arbitration shall be shared equally by the parties to the MOU. However, expenses occurred by each party in connection with preparation, presentation should be borne by the parties itself.

Pending the submission of and / or decision on a dispute, difference or claim or until the arbitral award is published; the parties shall continue to perform all of their obligations under this Contract without prejudice to a final adjustment in accordance with such award.

25. Jurisdiction

Any dispute arising out of the MOU or the terms shall be subject to the exclusive jurisdiction of **New Delhi** only.

26. Termination: (for Cause, Convenience, and Force Majeure)

- During the tenure of the agreement, either Party may terminate and nullify this Agreement/MOU by providing prior written notice of 30days to the other party for any of the reasons - Cause/convenience/Force Majeure.

- Termination for Convenience: For convenience without assigning any reason

- Termination for Cause: For the breach of any obligations/ responsibilities/ conditions of this agreement by the other party, with an opportunity to cure/rectify such a situation within thirty (30) days to the defaulting party and no remedial action is taken to the satisfaction of the aggrieved party.

- Termination for Force Majeure: in the event of "Force Majeure" as defined in clause #22.0

- Obligations upon Termination

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Following termination or expiration of this Agreement, in addition to any other obligations existing hereunder or otherwise at law or in equity,

(a) The rights and obligations of the parties thereto shall be settled by mutual discussion; the financial settlement if any shall take into consideration not only the expenditure incurred but also the expenditure committed by the parties hereto.

(b) The agreement arrived at between the parties hereto for the utilization of the intellectual property (defined in clause #19.0) shall survive the termination of the agreement

27. IN WITNESS WHEREOF, the Parties hereto have caused this MoU to be signed in their respective names on the day, the month and the year herein before mentioned.

Joint Secretary   24.6.2016
Department of Rural Development

(Seal)
APARAJITA SARANGI
Joint Secretary
Ministry of Rural Development
Government of India
Krishi Bhawan, New Delhi

Deputy Director   24/6
National Remote Sensing Center

(Seal)
डॉ.पी.जी. दिवाकर/Dr. P.G. Diwakar
उप निदेशक, आरएसएए/Dy. Director, RSAA
राष्ट्रीय सुदूर संवेदन केन्द्र
National Remote Sensing Centre
इसरो/ISRO अन्तरिक्ष विभाग/Dept. of Space
भारत सरकार/Govt. of India
बालानगर, हैदराबाद/Balanagar, Hyderabad-500 037,

Witness:

Name:

Address:
Dr. Kushal Pathak
Director
(Saansad Adarsh Gram Yojana)
M/o Rural Development
Krishi Bhawan, New Delhi

24.06.2016

Witness: Ravi Sankar

Name: Dr. T. RAVISANKAR

Address: 4 Rmg Diy LEUMS
NRSC, 144

162

10. letter to states for GIS implementation all waves dated 27 June 2016

<div align="center">

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

</div>

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Krishi Bhawan, New Delhi
Dated: 27th June, 2016

</div>

To,
Principal Secretaries/ Secretaries of all States / UTs
Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Subject: **GIS Implementation of Mahatma Gandhi NREGA Assets - Identification of Districts and preparation of Training Calendar**

Dear Sir/Madam,

Kindly refer to this Ministry's even number letter dated 08-06-2016 regarding identification of GIS Pioneering District (GPD). Ministry has entered into MoU with National Remote Sensing Centre, ISRO to undertake geo-tagging of Mahatma Gandhi NREGA Assets on a turn-key basis on 24-06-2016. All assets under Mahatma Gandhi NREGA will invariably be geo-tagged (latitude and longitude) along with photograph through mobile application. Considering the readiness of the solution, it has now been decided to rollout Geo-tagging of completed assets under Mahatma Gandhi NREGA on a Big-bang approach where-in all Gram Panchayats will simultaneously move to the new fully functional system on a given date. Accordingly the revised rollout strategy has been worked out (Annexure-I).

There will be a pilot in 34 Gram Panchayats, one in each of Pioneering District under each State, Wave-I rollout in 100 Districts and Wave-II rollout in remaining districts. The pilot Gram Panchayat will be from the GIS Pioneering District chosen by each State. For the Wave I, State will have to choose more Districts as per the Schedule attached as Annexure-II totalling to 100 Districts and indicate the remaining District for the Wave-II. The reporting format is available in Annexure-III.

The Ministry will provide necessary capacity building and training support for all functionaries associated with geo-tagging. The detailed training strategy followed by all GPs of GIS Pioneering Districts is at Annexure-IV. The reporting format for the training calendar is available in Annexure -V. Necessary funding support for the training programme will be provided by the Ministry on receipt of training calendar. The geo-tagging of Mahatma Gandhi NREGA completed asset is a mandatory requirement to be fulfilled by each of the State Governments.

As the implementation is planned to be executed in a very short duration, the project is extremely time-bound and critical. You are therefore requested to intimate the **Rollout Strategy (Annexure-III) by 05-07-2016 and Training Calendar (Annexure-V) by 21-07-2016 positively** to Director MGNREGA at his email kushal@nic.in

We solicit your cooperation and timely action to make this a success.

<div align="right">

(Aparajita Sarangi)
Joint Secretary, MGNREGA

</div>

Enclosures as above

The Wave I will be launched in 100 GPDs (all Gram Panchayats) after successful completion of pilots in 34 testing sites. Wave I will thus include all Gram Panchayats which are chosen as Testing sites (GPD 1) and also those chosen under GPD 2. This stage will mark the Project as 'GO-LIVE'.

After successful implementation in Wave-I in each of the GPD, implementation of Wave- II will be done in all GPs of the remaining 561 districts as per the timelines prescribed by the Ministry.

Timelines

Pilots in 34 GPs of GPD	1st August 2016
Wave-I rollout in 100 Districts	1st September 2016
Wave-II rollout in remaining Districts	1st November 2016

Annexure I: Rollout Phases Summary

The rollout is spread into two Waves, i.e. Wave I and Wave II. Wave I are the selected Districts of the State which are geared and pre-disposed towards GIS implementation at the early stage. Hence these GIS Districts are called as GIS Pioneering Districts (GPD). A total of 100 Districts will be selected across all States as GPDs. These GPDs will be nominated by State Government based on the site readiness both in terms of resources, connectivity and manpower preparedness. No mobile hardware will be supplied to the District and States will have to manage locally. The preferable method is Bring Your Own Device (BYOD) concept. The Mobile hardware specifications are as below:

CPU	1.3 GHz
OS	Android 4.4
Display	TFT capacitive touch screen 3.5"
Connectivity	GPRS, GPS and A-GPS, Wi-Fi
3G enabled	Yes
Rear Camera	5 MP
RAM	2 GB RAM
Internal memory	8 GB
External Storage compatibility	16 GB

These GPDs are further divided into Districts where Pilots will be conducted. These Pilot GPDs are called as GIS Pioneering Testing Site District (GPTSD). Each of GPTSD will inturn choose one Gram Panchayat from their District which will become testing sites for the GIS Implementation. These Gram Panchayat will be called as GIS Pioneering Testing Site Gram Panchayats(GPTSG) and its corresponding block will be called as GIS Pioneering Testing Site Block (GPTSB). Thus there will be 34 GPTSDs with 34 Gram Panchayat Testing Sites.

Annexure III: GIS Pioneer District selection for Wave I and Wave II

S. No.	Name of the State	PILOTS & WAVE I								Name of the SGNO	Email & Mobile of SGNO	Wave II District		
		GIS Pioneering District I					GIS Pioneering District II							
		Name of the District (GPD 1)	Name of the Gram Panchayath (GPTSG) Chosen Under GPTSD	Name of the Block (GPTSB) associated with the GPTSG	Name of the DGNO	Email & Mobile	Name of the District (GPD 2)	Name of the DGNO of GPD 2	Email & Mobile			Name of the District (Wave II)	Name of the DGNO	Email & Mobile
1														
2														
3														
4														
5														
6														
7														

GPSTD - GIS Poineer Testing State District

GPTSB - GIS Pioneering Testing Site Block

GPTSG - GIS Pioneering Testing Site Gram Panchayat

DGNO - District GIS Nodal Officer

SGNO - State GIS Nodal Officer

GPD - GIS Pioneer District

Annexure IV: Capacity Building Plan

Stage	Name	Date	Organise	Participants	Number	Duration
Stage 1	National Workshop on GIS Implementation in MGNREGA	26.07.2016	MoRD	State Principal Secretaries/Secretaries MGNREGA	34	1 Day
				Commissioner MGNREGA	34	
				Wave I Districts	100	
				SGNO	34	
				DGNO	100	
				NIRD and SIRD	50	
				NRSC	10	
				MORD	50	
				Sub Total	**412**	
Stage 2	GIS MGNREGA Regional Resource Person (GMRRP) Training	28 & 29 July 2016	CGARD NIRD & NRSC	SIRD & State Nominations	35	1 Day
				GPTSG MSE	34	
				GPTSG GAS	34	
				Sub Total	**103**	
Stage 3	GIS MGNREGA Block Champions Training for Wave I	1st August to 5th August 2016	NRSC,RRP & GPDT in 11 SIRD & NIRD	District Champions *One Per Block of each District of Wave)	Each State will work out the calender	1 Day Per Batch
				DGNO		
Stage 4	GIS MGNREGA Block Level Training for Wave I	5th August to 30th August 2016	GIS Champions	MSE & GAS of Wace I	Each State will work out the calender	1 dDay per batch
State 5	GIS MGNREGA Block Champions Training for Wave II	7th August to 30th August 2016	NRSC,RRP & GPDT in 11 SIRD & NIRD	Block Champions (One Per Block of Each District of Wave II)		
Stage 6	GIS MGNREGA Block Level Training for Wave II	1st Oct to 30th Oct 2016	GIS Champions	MSE & GAS of Wace II	Each State will work out the calender	1 dDay per batch

11. letter to NIRD for training and capacity building dated 30 June 2016

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

Krishi Bhawan, New Delhi
Dated: 30th June, 2016

To,

Dr. W. R. Reddy, Director General
National Institute of Rural Development & Panchayat Raj
Hyderabad

Subject: Training and Capacity building proposal of NIRD & PR under GeoMGNREGA

This is in reference to your office proposal dated 28.06.2016 regarding training and capacity building for GIS Implementation under MGNREGA at the total cost of 8.72 Crore.

2. As you are aware that the, Ministry has entered into MoU with National Remote Sensing Centre, ISRO to undertake geo-tagging of Mahatma Gandhi NREGA Assets on a turn-key basis on 24-06-2016. All assets under Mahatma Gandhi NREGA will invariably be geo-tagged (latitude and longitude) along with photograph through mobile application. Considering the readiness of the solution, it has been decided to rollout Geo-tagging of completed assets under Mahatma Gandhi NREGA on a 'Big-bang approach' where-in all Gram Panchayats will simultaneously move to the new fully functional system on a given date. (Annexure-I to V).

3. To this effect, there will be a pilot in 34 Gram Panchayats, one in each of Pioneering District under each State, Wave-I rollout in 100 Districts and Wave-II rollout in remaining districts. All the functionaries identified by the State Government will be required to be given training. The training structure and timelines are enclosed.

4. The Ministry has examined the NIRD & PR proposal and approved the training plan for GeOMGNREGA from the funds already available with NIRD & PR under MGNREGA Training and Capacity funds. As the implementation is planned to be executed in a very short duration, the project is extremely time-bound and critical and therefore may be accorded top priority.

This issues with the approval of Secretary Rural Development.

Aparajita Sarangi
(Joint Secretary MGNREGA)
30|6|16

Enclosures as Above

Annexure V: Training Calendar of the State for MSE & GAS training

Name of the State							
GIS MGNREGA Block Level Training for Wave I (Stage 4)							
SN	Name of the Block	Name of the District	Date From	Date To	Number of Participants	Location of Training	Name of GPDC	Mobile Number of GPDC
	1	2	3	4	5	6	7	8
1								
2								
3								
4								

Name of the State							
GIS MGNREGA Block Level Training for Wave I (Stage 6)							
SN	Name of the Block	Name of the District	Date From	Date To	Number of Participants	Location of Training	Name of GPDC	Mobile Number of GPDC
	1	2	3	4	5	6	7	8
1								
2								
3								
4								

12. Letter to states for national orientation workshop on GeoMGNREGA dated 8ᵗʰ July 2016

<div align="center">

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

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Krishi Bhawan, New Delhi
Dated: 08th July, 2016

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To,
Principal Secretaries/ Secretaries of all States / UTs
Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Subject: **Invitation for One Day National Orientation workshop (NOW) on GeoMGNREGA**

Dear Sir/Madam,

You are aware about the recent initiative for the GIS Implementation of completed assets under MGNREGA through bhuvan platform. Ministry of Rural Development has entered into agreement with National Remote Sensing Centre, Department of Space to provide technology solution on a turn-key basis.

Considering the readiness of the solution, it has now been decided to rollout Geo-tagging of completed assets under Mahatma Gandhi NREGA on a Big-bang approach where-in all Gram Panchayats will simultaneously move to the new fully functional system on a given date. As per the implementation plan, the pilots will be conducted in 34 Gram Panchayats in GIS Pioneering Districts of every State / UT w.e.f 1st August 2016, and the Wave -I rollout in 100 Districts w.e.f. 1st September 2016 and Wave-II rollout in all other Districts w.e.f. 1st November 2016. All completed assets under Mahatma Gandhi NREGA will invariably be geo-tagged (latitude and longitude) along with photograph through mobile application. The geo-tagging of Mahatma Gandhi NREGA completed asset is a mandatory requirement to be fulfilled by each of the State Governments.

I am happy to invite you, Commissioner MGNREGA, State GIS Nodal Officer, District Collectors/ DCs, District GIS Nodal Officers who are associated with GIS Pioneering Districts (Wave-I), and Regional Resource Persons from SIRD / States for a day long **National Orientation Workshop (NOW) on GeoMGNREGA at Vigyan Bhavan on 9th August 2016**. The detailed registration format and Program Schedule is attached.

The GeoMGNREGA program overview, Operating Procedure, demonstration of Mobile app and portal, unveiling of Standard Operating Manual for implementation are few of the things that will be part of the NOW on GeoMGNREGA.

You are requested to confirm your participation in the attached format and mail it at **kushal@nic.in** on or before 15th July 2016.

The GIS project is an important time bound initiative that will help the state Government in appropriate Geo-spatial planning and monitoring. We solicit your participation in the event.

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(Aparajita Sarangi)
Joint Secretary, MGNREGA
8|7|16

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Enclosures as above

Annexure II: Statewise number of GPs to be identified

S. No.	States/UTs	No. of Districts	No. of Panchayats	Pilots GPD	Wave I GPD	Wave I GPDII	Wave I Total	Wave II
1	2	3	4	5	6	7	8	9
1	Andhrapradesh	13	13084	1	1	1	2	11
2	Arunachal Pradesh	20	1827	1	1	2	3	17
3	Assam	27	2644	1	1	2	3	24
4	Bihar	38	8529	1	1	3	4	34
5	Chattisgrah	27	10971	1	1	2	3	24
6	Goa	2	190	1	1	1	2	0
7	Gujart	33	14330	1	1	4	5	28
8	Haryana	21	6314	1	1	2	3	18
9	Himachal Pradesh	12	3251	1	1	1	2	10
10	Jammu And Kashmir	22	4206	1	1	2	3	19
11	Jharkhand	24	4422	1	1	2	3	21
12	Karnataka	30	6019	1	1	3	4	26
13	Kerala	14	941	1	1	2	3	11
14	Madhya Pradesh	51	22827	1	1	4	5	46
15	Maharashtra	34	28670	1	1	5	6	28
16	Manipur	9	3133	1	1	1	2	7
17	Meghalaya	11	6206	1	1	1	2	9
18	Mizoram	8	876	1	1	1	2	6
19	Nagaland	11	1200	1	1	1	2	9
20	Odisha	30	6211	1	1	3	4	26
21	Punjab	22	13110	1	1	2	3	19
22	Rajasthan	33	9896	1	1	3	4	29
23	Sikkim	4	176	1	1	1	2	2
24	Tamil Nadu	31	12524	1	1	3	4	27
25	Telangana	9	8831	1	1	1	2	7
26	Tripura	8	1178	1	1	1	2	6
27	Uttar Pradesh	75	59177	1	1	6	7	68
28	Uttarakhand	13	7997	1	1	1	2	11
29	West Bengal	20	3347	1	1	2	3	17
30	Andaman and Nicobar	3	83	1	1	1	2	1
31	Dadra & Nagar Haveli	1	11	1	1	0	1	0
32	Daman & Diu	2	10	1	1	1	2	0
33	Lakshadweep	1	10	1	1	0	1	0
34	Puducherry	2	10	1	1	1	2	0
	Total Count	661	262211	34	34	66	100	561
						100		

Registration Format for National Orientation Workshop on GeoMGNREGA📍

Name of the State: _____

SNo	Name	Designation	District Name / State / SIRD	Email	Mobile Number

Programme Schedule of GeoMGNREGA

Hall No 6, Vigyan Bhavan, New Delhi
On 9th August, 2016

S.No.	Item	Time
1.	Registration	10.30 AM to 10.55 AM
2.	Welcome Address by Joint Secretary (RE)	11.00 AM to 11.15 AM
3.	Release of User Manual for GeoMGNREGA	11.16 AM to 11.20 AM
4.	Address by Additional Secretary	11.20 AM to 11.35 AM
5.	Address by Secretary, Space	11.36 AM to 11.50 AM
6.	Address by Secretary, Rural Development	11.51 AM to 12.00 PM
	Tea Break	12.00 PM to 12.15 PM
7.	Asset ID generation in NREGASoft and filling up of Asset Details by STD NIC	12.16 PM to 12.30 PM
8.	Importance of Fixed Asset Register and its procedure	12.31 PM to 12.45 PM
	for filling Dir MGNREGA	
9.	Orientation of Programme Implementation, rollout phases, Training Plan Dir MGNREGA	12.46 PM to 1.15 PM
	Lunch Break at ATRIUM, Vigyan Bhavan	01.16 PM to 2.00 PM
10.	User Registration Procedure in BhuvanGeoMGNREGA by NRSC	2.01 PM to 2.15 PM
11.	Demonstration of GeoMGNREGA Mobile App by Bhuvan by NRSC	2.16 PM to 2.30 PM
12.	Review of the Preparatory Activities in various States by JS (RE)	2.31 PM to 3.00 PM
13	Questions and Answer Session moderated by JS (RE)	3.01 PM to 4.00 PM

13. Email-GeoMGNREGA One day training for MGNREGA Spatial Enumerator and GIS Asset Supervisor at NIRD Hyderabad dated 29ᵗʰ July

From: Dr. Kushal Pathak Kushal@nic.in

Subject: GeoMGNREGA: One day training for MGNREGA Spatial Enumerator and GIS Asset Supervisor at NIRD Hyderabad on 29th July 2016

Date: 19 July 2016 8:12 am

To: Shri D Hynniewta drda-rb-meg@nic.in, Arunabha Das misnrega24n@gmail.com, Haritha pd_dwmarrd@yahoo.com, Mr. Navid Anjumul Hoque navidhoque07@gmaill.com, Shri. Tasso Gambo drdabomdila@gmail.com, P G Vijayakumar jpcnregawnd@gmail.com, Mr. Amrit Rathi amritrathi12@gmail.com, Vivek Dhiman bdosng-sir-hp@nic.in, Basavaraj .Y dszpcta@gmail.com, M. Venugopal Reddy ctrdpap@yahoo.co.in, Sh. Indrajeet Nimesh egsmmjhala@gmail.com, S.Thanikachalam thaniks_ae@yahoo.com, Shri. Sanket Joshi mgnregapat@gmail.com, Pijush Debbarma pijush1611@gmail.com, Shri. Hiralal Verma ceozpseh@mp.gov.in, Vinay Kumar Srivastava drda-skn@nic.in, Sh. Sibananda Tripathy ori-dkeonjhar@nic.in, Shri. Ravindra Ram ddc-nalanda-bih@nic.in, Mr. Ravikar Shhyam drda_ranchi@drdaran.com, Sh. Hakam Singh Rana drdaynr@hry.nic.in, Shri. Arensosang Jamir rn.jamir@gmail.com, Mr. Mandeep Singh dpenregamansa@gmail.com, Mr. Manoj Pradhan south.adpc@gmail.com, CC LALCHHUANGKIMA champhainrega@gmail.com, Smt. Manisha Jaybhaye dycollnagpur@mahmgnrega.com, N.Moonildro Singh moonildro10@yahoo.com

Cc: Gangadhar Swamy S karnregs@gmail.com, Pankaj Kumar Rana statemisnodaloff.jhr@gmail.com, G. Thong gwasinlo@yahoo.com, GEORGE B LYNGDOH megnregacell@gmail.com, Saroj Kumar brds.director@gmail.com, Sh. Aribam Dayananda Sharma statenodalofficer.mis@gmail.com, Amitabha Datta amitabha.datta@nic.in, Neerja Gupta upregs@gmail.com, Sami Mazhar Khan nregastatecell@gmail.com, M.KAVITHA kav.kavitha.m@gmail.com, M S Abdul Kalam Azad azaadms@gmail.com, Sundeep Wahi drd@hry.nic.in, Mukesh Vijay xenegsrdd@gmail.com, Shri Srimant Kumar Samal srimant.samal@yahoo.in, Dr. Subash Dhakal pkysub@gmail.com, G. Bala Subramanyam bala.annu@gmail.com, Shreemanta Kumar Samal srimant.samal@yahoo.in, Ovais Ahmed rddmp_mis@yahoo.com, Ravinder Pal Singh jdcirdp@yahoo.in, Samiran Dev Pathak mgnregamisassam@gmail.com, B. Saidulu bsaidulu@yahoo.com, Mr.Abhay Tijare mahaefms2013@gmail.com, A. K. Rajput rajputak@rediffmail.com, Sandeep Kaumr mgnregaell@gmail.com, Sanjib Das drditanagar@gmail.com, Sri Rajarshi Roy wbnrega@gmail.com, PAUL L KHUMA plkkhuma@gmail.com, Yogiraj Shete yogirajshete@gmail.com, Amit Jain amitjain.in@gmail.com, Dr Vasala Madhava Rao madhavarao.nird@gov.in, phanindrakumar.nird@gov.in

Dear District GIS Nodal Officers,

First of all congratulations for being chosen as Pioneers in GIS Implementation of MGNREGA in the whole country. Your District has been selected as GIS Pioneering District (GPD) and you have been nominated as District GIS Nodal Officer (DGNO). The project called as GeoMGNREGA involves photo Geo-tagging of all completed assets under MGNREGA.

This will be done by MGNREGA Spatial Enumerators (MSE) who could be GRS or Technical Assistant or others from Gram Panchayat. They will have to use their own android based smart phone having camera and internet connection. There could be one or more than one person nominated as MSE. Once the photo and Latitude / Longitude is captured by MSE, it will be uploaded on to the web portal through mobile phones.

This photo and Geo-tag (Latitude and Longitude) will then be available to GIS Asset Supervisor (GAS) at the block-level. The GAS is also nominated by District (State) at the Block-level. GAS should be Programme Officer (PO) of the block. However, District may nominate others also as GAS. There will only be one GAS in each block. The GAS will validate the photo and Geo-tag of the asset through the web portal. Once it is validated, the asset details will be available online.

As per the attached list, one Gram Panchayat and its associated Block each from your District will act as GIS Pioneering District Testing Site (GPDTS). As your District has been chosen for GPD Testing Site location, it is very important that MSE from GPDTS Gram Panchayat and GAS from corresponding block of GPDTS are nominated and training is imparted to them. This will help us in roll out in all other locations. The pilots will start w.e.f 1st August 2016 onwards in your District chosen GPDTS.

To this effect, NIRD&PR is conducting one day training, the details have already been circulated to all States by NIRD&PR. I am attaching the letter again. You are requested to:

1. Nominate GRS/ TE/ Other from your GPD Testing Site Gram Panchayat

2. Nominate PO/Other from your GPD Testing Site Block

3. Give the nomination to State Government for ensuring compulsory attendance at NIRD&PR for one day training on 29th July 2016.

4. Send the MSE & GAS nomination to NIRD&PR timely.

In case of any query, kindly write to me.

PN: I am marking this e-mail to State GIS Nodal Officer (SGNO) for early compliance.

Namaste,

Dr. Kushal Pathak Director

Saansad Adarsh Gram Yojana (SAGY) & Mahatma Gandhi NREGA

Ministry of Rural Development, Government of India

1. Room No 377, 3rd Floor, Krishi Bhawan, New Delhi +91 9136-777-000 kushal@nic.in

IMPORTANT: The contents of this e-mail and any attachments are confidential. They are intended for the named recipient(s) only. If you have received this email by mistake, please notify SAGY immediately and do not disclose the contents to anyone or make copies thereof.

If you received this email in error, please notify SAGY immediately by sending an e-mail or by calling.

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14. MoRD communication for Launch of Wave-1 Districts dated 29 August 2016

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

Krishi Bhawan, New Delhi
Dated: 29 August, 2016

To,

Principal Secretaries/ Secretary of all States / UTs
Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Subject : Launch of GeoMGNREGA Wave-I w.e.f September 1st, 2016

Dear Sir/Madam,

As you are aware that Ministry of Rural Development has initiated project on Photo Geotagging of Mahatma Gandhi NREGA Assets on 24th June, 2016. The pilots were launched from 1st August 2016 onwards in one Gram Panchayats of GIS Pioneer Districts of each of the 28 States. The pilots were successful in finalising the user requirements, mobile and web solution. Now National Remote Sensing Centre has intimated that the present mobile app is tested, functional and usable for deploying in the field for operational use. Further, the development of Web GIS Bhuvan portal is now completed.

2.   The NIRD & PR had successfully conducted nationwide training with the help of GeoMGNREGA Regional Resource Persons nominated from States/ SIRDs. District GIS Nodal Officers, Gram Rojgar Sahayaks / Technical Assistants, Block level Officials were all imparted training on the use of GeoMGNREGA solution for wave-I.

3.   **As per the original schedule, from 1st of September 2016, GeoMGNREGA will be launched in all the Gram Panchayats of wave-I** (list of Wave-I District attached). The MGNREGA Spatial Enumerator (MSE) can now download their current data of Gram Panchayats in their Mobile phones and start capturing the photographs and Latitude / Longitude of the completed assets under Mahatma Gandhi NREGA. The GIS Asset Supervisor (GAS) should start validating the assets uploaded by MSE through the online portal. Though the Geotag can be uploaded/validated during this time, the web portal will not be made available for General Viewing during this wave-I period. This wave will be called as GeoHome.

4.   To ensure smooth rollout of the GeoLive, each State will constitute State Level **"GeoMGNREGA Working Group"**, headed by Principal Secretary / Secretary looking after Mahatma Gandhi NREGA as the chairman during

GeoHome. This working group will consist of officials from Wave-I Districts DPCs, DGNOs and other officials as deemed fit. The working group will resolve all issues pertaining to assets mapping, geo coordinates, picture validation and data consistency during this GeoHome period. **The working group notification should be sent to MoRD**. This working group will hold one or more meetings and the final preparedness report for GeoLive should be submitted to MoRD on **24th October 2016** on email to kushal@nic.in. The assets coordinates and photographs will be **made available for General viewing w.e.f 1st Nov 2016** for Wave-I and GeoMGNREGA will go 'GeoLive' from this date. The timelines are as under:

Wave	GeoHome Period	GeoLive Date
Wave-I	1st September to 31st Oct 2016	1st November 2016 (Inauguration of GeoMGNREGA)
Wave-II	1st November to 31st January 2017	2nd Feb 2017 (on MGNREGA Sammelan day)

GeoMGNREGA is an important time bound initiative that will help the State Government in appropriate Geo-spatial planning and monitoring. I seek your personal interest and immediate intervention for successful implementation of Wave-I in Mahatma Gandhi NREGA **w.e.f 1st September 2016.**

Aparajita Sarangi
(Joint Secretary, MGNREGA)
29|8|1⊥.

Copy to :

1. Dr. Y.V.N. Krishna Murthy, Director, National Remote Sensing Center, Hyderabad
2. Dr. W. R. Reddy, Director General NIRD & PR, Hyderabad
3. Senior Technical Director NIC DoRD, New Delhi

GeoMGNREGA Wave-I Disrtricts

#	State	Districts
1	ANDAMAN AND NICOBAR	South Andaman
2	ANDAMAN AND NICOBAR	North & Middle Andaman
3	Andhra Pradesh	Chittoor
4	Andhra Pradesh	Ananthapur
5	Arunachal Pradesh	West Kameng
6	Arunachal Pradesh	Tawang
7	Assam	Goalpara
8	Assam	Morigaon
9	Assam	Dibrugarh
10	Bihar	Nalanda
11	Bihar	Arwal
12	Bihar	Munger
13	Bihar	Sheikhpura
14	Chattisgarh	Balod
15	Chattisgarh	Raipur
16	Chattisgarh	Durg
17	Gujarat	Patan
18	Gujarat	Bhavnagar
19	Gujarat	Navsari
20	Gujarat	Porbandar
21	Gujarat	Jamnagar
22	Haryana	Yamunanagar
23	Haryana	Panchkula
24	Haryana	Gurgaon
25	Himachal Pradesh	SIRMOUR
26	Himachal Pradesh	SOLAN
27	Jharkhand	Ranchi
28	Jharkhand	Giridih
29	Jharkhand	BOKARO
30	Karnataka	Chitradurga
31	Karnataka	Hassan
32	Karnataka	Chikkaballapura [1]
33	Karnataka	Belgaum
34	Kerala	Wayanad
35	Kerala	Thiruvananthapuram
36	Kerala	Malappuram
37	Madhya Pradesh	Sehore
38	Madhya Pradesh	Bhopal
39	Madhya Pradesh	Raisen
40	Madhya Pradesh	Harda
41	Madhya Pradesh	Betul
42	Maharashtra	Nagpur
43	Maharashtra	Amravati
44	Maharashtra	Aurangabad
45	Maharashtra	Nashik

GeoMGNREGA Wave-I Disrtricts

#	State	Districts
46	Maharashtra	Pune
47	Maharashtra	Thane
48	Manipur	Imphal East
49	Manipur	Senapati
50	MEGHALAYA	RI BHOI
51	MEGHALAYA	WEST JAINTIA HILLS
52	MIZORAM	CHAMPHAI
53	MIZORAM	KOLASIB
54	Nagaland	KOHIMA
55	Nagaland	PEREN
56	Odisha	Keonjhar
57	Odisha	Angul
58	Odisha	Cuttack
59	Odisha	Nabarangpur
60	Punjab	Mansa
61	Punjab	Fazilka
62	Punjab	Tarn Taran
63	Rajasthan	Jhalawar
64	Rajasthan	Baran
65	Rajasthan	Dholpur
66	Rajasthan	Udaipur
67	Sikkim	South Sikkim
68	Sikkim	North Sikkim
69	TAMILNADU	Kancheepuram [2]
70	TAMILNADU	Ariyalur
71	TAMILNADU	Tiruppur
72	TAMILNADU	Theni
73	Telangana	Ranga Reddy
74	Telangana	Medak
75	Tripura	West Tripura
76	Tripura	Sepahijala
77	Uttar Pradesh	Sant Kabeer Nagar
78	Uttar Pradesh	Agra
79	Uttar Pradesh	Barabanki
80	Uttar Pradesh	Jhansi
81	Uttar Pradesh	Mahoba
82	Uttar Pradesh	Saharanpur
83	Uttar Pradesh	Varanasi
84	Uttarakhand	Haridwar
85	Uttarakhand	US Nagar
86	West Bengal	North 24Parganas
87	West Bengal	Hooghly
88	West Bengal	Alipurduar

15. Invitation to State for Smoke Testing of GeoMNREGA dated 8 September 2016

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: 08th September,2016

To,
Principal Secretaries/ Secretaries of all States / UTs
Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Subject: 'Smoke Testing' for Wave-I of GeoMGNREGA Application

Dear Sir/Madam,

You are aware that recently GeoMGNREGA has been launched in 88 Districts of Wave-I all across the country on 1st September 2016. States GIS Nodal Officers/District GIS Nodal Officers/GIS Asset Supervisor/MGNREGA Spatial Emulator have given feedback on the improvement during the pilot phase. Based upon the user requirement, the solution has undergone multiple changes and after the internal testing it has been deployed w.e.f 1st September 2016 in Wave-I.

2. It has been decided by Ministry to conduct 'Smoke Testing' by which we will run a subset of test cases that cover the most important functionality of the GeoMGNREGA system, to ascertain if crucial functions of the software work correctly. The smoke testing will address basic questions for example; "Does the program run?", "Does it open a window?", or "Does clicking the main button do anything?" e.t.c

3. Ministry of Rural Development has constituted 'Smoke Tester Group' which include all State GIS Nodal Officers, One nominated field level official (DGNO/GAS/Technical Expert/MSE/others) from each state, Officials and Experts from MoRD. You are therefore, requested to depute the concerned official from your state to be part of Smoke Testers' Group.

4. MoRD is holding Smoke Testing for Wave-I on 16th September 2016 at Unnati Hall, Krishi Bhavan, MoRD starting from 9.30 AM onwards, where-in NRSC & NIC will demonstrate each of the module as per the agenda and Smoke Testers will contribute in the final vetting of them. The detailed programme schedule along with the Testing Group is attached

5. The Smoke testing is vital step in the final deployment of GeoMGNREGA in the Big-Bang Districts and contribution from Smoke Testers will be truly useful. We solicit your state participation in the event.

(Aparajita Sarangi)
Joint Secretary, MGNREGA

Enclosures as above

Copy to:
PPS to SRD

16 Smoke Testing Minutes dated 21 September 2016

<div align="center">

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

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Krishi Bhawan, New Delhi
Dated: 21ˢᵗ September,2016

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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 16ᵗʰ November, 2016.

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:

Principal Secretaries/ Secretaries of all States / UTs, Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Dr. Y.V.N. Krishna Murthy, Director, National Remote Sensing Centre, Hyderabad

Sh. Prashant Mittal, Senior Technical Director, National Informatics Centre, New Delhi

Dr Vasala Madhava Rao, Professor & Head, C-GARD, National Institute of Rural Development & Panchayati Raj, Hyderabad

Programme Schedule

SMOKE TESTING FOR WAVE-I GeoMGNREGA

S.No.	Event	Speaker	Time
1	Overview and current progress of GeoMGNREGA	JS (MGNREGA)	9.30 AM to 9.40 AM
2	Overview and current Status of Bhuvan	Dir NRSC	9.40 AM to 9.50 AM
3	Review of the progress in States	JS (MGNREGA)	09.50 AM to 10.15 AM
	Tea Break		10.15 AM to 10.30 AM
4	Smoke Testing Session 1		10.30 AM to 01.30 PM
4.1	Asset Completion & Asset ID Generation in NREGASoft NIC	STG1	
4.2	Web Services for Location Master NRSC		
4.3	Web Services for Asset Master and Asset details NRSC		
4.4	Bhuvan Registration Process NRSC	STG2	
4.5	GeoMGNREGA Mobile App Registration Process NRSC		
	Lunch Break		1:30 PM to 2:00 PM
5	Smoke Testing Session 2		2.00 PM to 4.00 PM
5.1	Asset Acceptance Module from App to Portal NRSC	STG3	
5.2	Asset Rejection Module from App to Portal NRSC		
5.3	Asset Flagging Module from App to NREGASoft NRSC	STG4	
5.4	MIS Module for reports NRSC & NIC	STG5	
6	Features & Improvement suggestions States	All Groups	4.00 PM to 4.30 PM
7	Summary of Smoke testing and Future course of Action	Dir (MGNREGA)	4.30 PM to 4.55 PM
8	Vote of Thanks	Dir (MGNREGA)	4.55 PM to 05.00 PM
STG	Smoke Testing Group		
STG1	Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Mizoram, Tamil Nadu, Tripura, Uttar Pradesh,		
STG2	Andaman & Nicobar Island, Arunachal Pradesh, Assam, Kerala, Manipur, Meghalaya,		
STG3	Bihar, Jharkhand, Nagaland, Odisha, Punjab, Sikkim,		
STG4	Himachal Pradesh, Karnataka, Rajasthan, Telangana, Uttarakhand,		
STG5	Gujarat, Haryana, Maharashtra, West Bengal		

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 organisation who participated in the smoke testing is attached as Annexure-1. Following States did not participate:

Andhra Pradesh

Meghalaya

Manipur

Jammu & Kashmir

Goa

Andaman and Nicobar

Puducherry

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

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.

It was informed that MoRD will institutionalise 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.

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.

As per the information received on 16 September, 2016 by the States 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.

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.

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)
kushal@nic.in

Annexure -1

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

Smt Aparajita Sarangi, JS(RE)

Shri V Bhanumurthy Deputy, Director, RSAA

Dr. Kushal Pathak, Director SAGY & MGNREGA

Dr Girish S Pujar Scientist SF, RDWMD, NRSC

Shri Arulraj Murugvel Manager, BWS, NRSC

Shri A Lesslie, Scientist SE, ASD & CIG, NRSC/ISRO

Shri T. Phanindra Kumar, C-GARD, NIRD&PR

Shri Selveswaran M., PSA, NIC, DORD

Shri Atul K Singh, SA, NIC, DORD

Shri Ranjit Jadhav, Project Officer, MORD

Shri Anil Singh, Project Executive, MORD

Shri Mukesh Kumar, Project Executive, MORD

Shri Vivek Anand, Project Executive, MORD

Ms. Shruti Singh, Fellow, MORD

Shri Amit Jain, Project Executive, GeoMGNREGA Operations

Ms. Ankita Sharma, Project Executive, GeoMGNREGA Coordination

Participated Members (States):-

S.No.	State	Participant Name (Shri/Ms)	Designation
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

S.No.	State	Participant Name (Shri/Ms)	Designation
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 🔶

S.No.	Event	Groups	Discussion and Action Points
1	Smoke Testing Session 1		
1.1	Asset Completion & Asset ID Generation in NREGASoft NIC	ST G1(Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Mizoram, Tamil Nadu, Tripura, Uttar Pradesh) 1. Understanding of Primary and Secondary Asset 2. Role clarity of GAS, Official completing the work and Data Entry Operator 3. Creation of One Work to One Asset 4. Creation of One Work to Multiple Assets 5. Entry of Asset Id into Fixed Asset Register(FAR)	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. Action: NRSC and NIC,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. 2. Successful 3. Successful 4. This was considered as essential requirement by MoRD. Action: NIC (Before: 10 Oct, 2016), 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. 1. Successful
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. Action: NRSC, As agreed the CRON will be scheduled to pull the NREGASoft location master every Sunday at 8 PM.

S.No.	Event	Groups	Discussion and Action Points
13	Web Services for Asset Master and Asset details NRSC 1. Sending of packets more than 1000 records by NIC 2. Successful testing of Data at Bhuvan 3. Reconciliation of complete data handshake		1, 2 & 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 request id =NEWREQUEST gave 1000 records with available records count to download. But next request again calls with NEWREQUEST 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. Action: As successful establishment of data 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.
14	Bhuvan Registration Process NRSC 1. Successful Registration of GAS and DGNO 2. Successful testing of permissions and moderations at the level of SGNO	STG2 (Andaman & Nicobar Island, Arunachal Pradesh, Assam, Kerala, Manipur, Meghalaya)	1. Successful 2. Successful

S.No.	Event	Groups	Discussion and Action Points
1.5	GeoMGNREGA Mobile App Registration process-NRSC	1. Successful registration of MSE 2. Successful reregistration of MSE through another mobile phone 3. Successful restriction of permissions till approval of account and display of message about validation	1. Successful. It was found out that registration for waveII is not allowed at Bhuvan. This was considered as essential requirement by MoRD. Action: NRSC, As agreed (i) the MSE/GAS/DGNO registration for WaveII districts should be allowed. (ii) The mobile number of MSE should be visible as a column to GAS at the moderation panel. 2. Successful. 3. Restriction not present: It was pointed out that user without authorisation 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. Action: NRSC: It was agreed that same would be done so that only an authorised user can download the asset information and only after validation of the account. States requested that one MSE should be 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 reregistration should be mandatory for MSE. This was accepted and agreed upon. This was treated as a mandatory requirement by MoRD. Action NRSC, to ensure that appropriate permission are enabled.
2	Smoke Testing Session 2		2

S.No.	Event	Groups	Discussion and Action Points
2.1	Asset Acceptance Mobile from App to Portal NRSC	1. Successful selection of Asset. 2. Successful capture of GPS (10 meters accuracy). 3. Successful capture of 2 pictures of Asset. 4. Save an Asset 5. Send an Asset. 6. Testing of Send Later, Sent Failed and View Sent List. 7. Testing: Asset once uploaded should not be available with the same MSE mobile app. 8. Testing: The mobile application should not allow uploading of Geotag information once uploaded earlier.	ST G3 (Bihar, Jharkhand, Nagaland, Odisha, Punjab, Sikkim)	1. Successful. 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. Action: NRSC, GPS lock and photo coordinates along with the distance between the two should be available for auditing purpose 3. It was decided in consultation with the State that 2 picture per geotag to be made mandatory. Action: NRSC, Minimum two pictures should be made mandatory in the GeoMGNREGA mobile application. 4. Successful. This was treated as a mandatory requirement by MoRD. Action NRSC. The States pointed out that NRSC should ensure that there are least chances for tampering of Photograph prior to uploading. 5. During the testing by Odisha and Bihar, the asset geo information uploaded was not visible on for validation in tabular formats. However in map also it was not visible immediately. Similar issues were reported by Wave I districts during Pilot and GeoHome. This needs to be resolved and was treated as a mandatory requirement by MoRD. Action: NRSC, The asset information from mobile to Bhuvan should be available in 2 minute cycle both on Map and in tabular formats for moderation. Sent Later: Their should be delete option from the mobile application for assets which are geo captured but not uploaded. Action: NRSC 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 popup window should show that the "Asset validation is pending at GAS". This was treated as a mandatory requirement by MoRD. Action NRSC: 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. Action NRSC: 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.

S.No.	Event	Groups	Discussion and Action Points
2.2	Asset Rejection Module from App to Portal NRSC	1. Successful rejection of asset by GAS with appropriate reason 2. Availability of photograph from only authorised MSE in the GAS login. 3. Measurement of time taken from rejection from the Bhuvan portal to the availability into the mobile application. 4. Availability of rejected assets separately along with reasons in the Mobile Application for MSE	Module of rejection could not be tested as Para 2.1 decision need to be implemented first. 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. 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. **Action:** NRSC to incorporate the asset name and description in the moderation panel 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. **Action:** NRSC, once the asset is rejected by GAS, on selection of an asset by MSE, the popup window should show "Asset rejected by GAS with following reasons…………."
2.3	Asset Flagging Module from App to NREGASoft NRSC	1. Successful flagging of assets along with "Key in Discrepancy" by MSE. 2. Successful flagging of assets along with "Key in Discrepancy" by GAS. 3. Measurement of time taken from Bhuvan to NREGASoft in transmission of flagged data.	ST G4 (Himachal Pradesh, Karnataka, Rajasthan, Telangana, Uttarakhand)	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. **Action:** NRSC, this bug need to be corrected. 2. **Successful with some bugs:** A message pops up stating "asset is already rejected" but actually the asset is flagged and removed from map. **Action** NRSC, it should be rectified. 3. Successful. As the flagged asset data is critical, it should be synchronised frequently. It was treated as an essential requirement by MoRD. **Action:** NRSC, As agreed the CRON to push flagged ~~~~ should be scheduled for 2 minute cycle.

S.No.	Event	Groups	Discussion and Action Points
	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 the geo information of this flagged asset. 5. Testing: Once the asset is geo tag and approved and validated by the GAS, it should not be allowed by flagged.		4. **Successful**: Only relevant Gram Panchayat data should be visible instead of complete block data. **Action**: NIC,Only assets of relevant Gram Panchayat should be visible during correction of assets in the exception report for flagged assets. 5. Successful.
2.4	MIS Module for reports NRSC & NIC	STG5(Gujarat, Haryana, Maharashtra, West Bengal)	1. **Successful**: Phone number of MSE should be visible instead of UUID for validation. **Action**: NRSC, as agreed the Phone number should also be visible in the list of MSEs at all level. 2. Inconsistency in the data reports were noticed. **Action**: NRSC,The statistical data were found to be mismatched which need to be corrected. The drill down to block-level should be available.
	1. Availability of performance reports and rejection reports at the DGNO level 2. Availability of performance reports at the SGNO Level 3. Availability of performance reports at the Central Level 4. Central-level Login credential for National Level Management		
3	Features & Improvement Suggestions States	All Groups	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. 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
	As per the GeoMGNEREGA BF module (Annexed)		

17. Video Conferencing Invitation to States dated 8 September 2016

<div align="center">

No. M11011/02/2016REIII

Government of India

Ministry of Rural Development

Mahatma Gandhi NREGA Division

GeoMGNREGA 📍

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Krishi Bhavan, New Delhi

Dated: 08ᵗʰSeptember 2016

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Video Conferencing Notice

Subject: Video Conferencing on GeoMGNREGA for WaveI on 05ᵗʰOct 2016

As per the instructions contained in this office letter even dated 29ᵗʰ August 2016, GeoHome Period of WaveI of GeoMGNREGA had started in your state in GIS Pioneering Districts w.e.f 1ˢᵗ September 2016 during which the GeoAssets created under your States are available on the Bhuvan portal for restricted viewing. These assets will be made available for all visitors w.e.f 1ˢᵗ November 2016 onwards. During this time, it was requested from State to constitute "GeoMGNREGA Working Group" headed by Principal Secretary / Secretary looking after Mahatma Gandhi NREGA and also consisting of officials from WaveI Districts DPCs, DGNO and other officials as deemed fit.

The scope of work of this working group will be to resolve issues pertaining to asset mapping, Geo-Coordinates, picture validation and data consistency of their respective state. It has been requested to share the **notification of constitution of Working Group**, and to submit the final preparedness **report on 24ᵗʰOct 2016 to MoRD**.

Ministry of Rural Development is holding a Video Conferencing Review meeting on05ᵗʰ Oct 2016 at 02.30 PM onwards with Principal Secretaries / Secretaries looking after Mahatma Gandhi NREGA, MGNREGA Commissions, SGNO and other members of GeoMGNREGA Working Groupon the following agenda:

Review of the GeoMGNREGA implementation with special focus on the quality of GeoAssets.

Review of the 'GeoMGNREGA Working Group' and preparedness for GeoLive of WaveI GIS Pioneering Districts on 1ˢᵗNovember 2016

Preparedness for the GeoHome period of WaveII Big Bang Launch on 1ˢᵗ November 2016

You are requested to ensure presence of Principal Secretary / Secretary Incharge of MGNREGA, Commissioner MGNREGA, SGNO and Members of GeoMGNREGA Working Group during the Video Conferencing.

Encl: The VC ID details

Dr. Kushal Pathak

<div align="right">

Director MGNREGA

Kushal@nic.in

</div>

To

Principal Secretary / Secretary InCharge MGNREGA All States and

UT Copy to

PPS to Secretary RD

PS to JS (RE)

SO (General) for booking Unnati Hall, Krishi Bhavan and Logistics

VIDEO CONFERENCING DIVISION
NATIONAL INFORMATICS CENTRE, New Delhi

Confirmation Details of Request for VC Session

Dear Sir/Madam, Atul Kumar Singh	
VC-ID[Status]	**177197 [Confirmed]**
DATE	05-10-2016
TIME [Duration]	02:30 PM - 04:30 PM [02.00 Hrs]
VC LEVEL	JS/AS/Director, Govt. of India
MINISTRY	M/o Rural Development
DEPARTMENT	Department of Rural Development
PURPOSE	VC with States (MGNREGA)
VC COORDINATOR	DL-Delhi

PARTICIPATING SITES : (35)

1- Krishi Bhawan(Rural) (Host Studio) 2 - Agartala-NIC, 3 - Aizwal-NIC, 4 - Bengaluru- NIC, 5 - Bhopal-NIC, 6 - Bhubneshwar-NIC,7 - Chandigarh(HR)-NIC1, 8 - Chandigarh-PB-NIC1, 9 - Chennai-NIC1, 10 - Daman- NIC, 11 - Dehradun-NIC, 12 - Gandhi Nagar-NIC, 13 - Gangtok-NIC, 14 - Guwahati-NIC1, 15 - Hyderabad-NIC AP, 16 - Hyderabad-Urban TS, 17 - Imphal-NIC, 18 - Itanagar-NIC, 19 - Jaipur-NIC, 20 - Jammu-NIC, 21 - Kavaratti- NIC, 22 - Kohima-NIC, 23 - Kolkata-NIC-Saltlake, 24 - Lucknow-NIC1, 25 -Mumbai-NIC, 26 - NIC-RAIPUR-CGSU1, 27 - North Goa, 28 - Patna-NIC, 29 - Port Blair- NIC, 30 - Puducherry NIC, 31 - Ranchi-NIC, 32 - Shillong-NIC, 33 - Shimla-NIC, 34 - Silvassa- NIC, 35 - Thiruvananthapuram-NIC

WEBROOM : --NA--

OUTSIDE NICNET SITES : --NA--

NOTE: For any information or modification related to this VC Session may please contact to Atul Kumar Singh (Email: atulkumar.singh@nic.in, Mobile No: 9650048848). Always mention VC-ID for further communication.

18. GeoMGNREGA Final Review Meeting dated 30 September 2016

No. M11011/02/2016REIII (PartI)

Government of India

Ministry of Rural Development

Mahatma Gandhi NREGA Division

GeoMGNREGA 📍

Krishi Bhawan, New Delhi

Dated: 30th September, 2016

To,

Principal Secretaries/ Secretary of all States / UTs

Department of Rural Development/Panchayati Raj (In charge of MGNREGA)

Subject : Final Review meeting on GeoMGNREGA Working Group Dear Sir/Madam,

As you are aware that GeoMGNREGA has been launched in the Wave-I Districts w.e.f. 1st September 2016. To ensure smooth rollout of the GeoLive, each State / UT were requested to constitute State Level "**GeoMGNREGA**

Working Group"(GWG), headed by Principal Secretary / Secretary looking afterMahatma Gandhi NREGA as the chairman. GWG has been given the mandate to resolve all issues pertaining to assets mapping, geo coordinates, picture validation and data consistency during this GeoHome period in the respective State /UT. This working group will hold one or more meetings and give the final preparedness report on 24th Oct 2016, so that the solution can be made GeoLive for Wave-I.

Your State / UT has shown keen interest during the pilots and wave-I GeoHome phase. Earlier, all States / UT have nominated officials to conduct the 'Smoke Testing' session on 16th September 2016 which has helped in documenting essential feature requirements and improvements required in the final solution. Those who have been accepted by MoRD and will be incorporated by NRSC & NIC. We are now hopeful that with extensive training undertaken which is scheduled to be completed by oct 30th 2016, we are also in a position to launch GeoMGNREGA for Wave-II in Big Bang Districts and make Wave-I data available for viewing. The Ministry is setting up Service Support Desk at C-GARD, NIRD&PR to provide long term handholding and troubleshooting support in your endeavor.

Hon'ble Minister for Rural Development has decided to launch GeoMGNREGA on 16th November 2016 at Ranchi, Jharkhand. The time has come for the final review of your State / UT preparedness and demonstration of final solution after incorporating all of your suggestions by NRSC.

The Ministry has set the modest target for Geotagging of Assets in your State / UT Government for Wave-I which is attached. This target need to be met on or before the Final Review meeting scheduled on 25th Oct. 2016. Further, Ministry has also devised 7 Monitoring Governance Framework for each State/ UT over which each State will be reviewed monthly. (Attached) The first report may be sent on **24th Oct. 2016** before the Final Review Meeting on the below mentioned email.

Keeping this Ministry is holding "Final Review Meeting" with **chairpersons of GeoMGNREGA Working Group on 25th Oct. 2016 at Unnati 10 AM onwards.** The agenda of the full day meeting is attached. You are requested to participate in the meeting along with Commissioner MGNREGA and State GIS Nodal Officer. A line of confirmation for participation may be sent over email to team@geomgnrega.in.

Looking forward for your active participation during the Final Review Meeting of GeoMGNREGA.

Aparajita Sarangi
(Joint Secretary, MGNREGA)

Copy to:

1. Dr. Y.V.N. Krishna Murthy, Director, National Remote Sensing Center, Hyderabad.

2. Dr. W.R. Reddy, Director General, NIRD&PR, Hyderabad.

3. Senior Technical Director, NIC, DoRD, New Delhi.

No. M11011/02/2016REIII (PartI)

Government of India

Ministry of Rural Development

Mahatma Gandhi NREGA Division

GeoMGNREGA 📍

Final Review Meeting on GeoMGNREGA

AGENDA

25th October, 2016 at 10:00 AM

S.No.	Event	Presenter	Time
1	Welcome and Objectives of GeoMGNREGA Launch on 16th November 2016	JS (MGNREGA)	10:00 AM
2	Presentation and review on following 1. Findings of GWG Presentation on Report MGF-1: Status of Work to Asset Generation for Wave-I 2. Presentation on Report MGF-2: Status of Asset to Geo-tagging conversion of Asset to Geo-tagging Conversion for Wave-I 3. Presentation on Report MGF-3 Status of Moderation in Geotag for Wave-I 4. Presentation on Report MGF-4 Status of Registration of GeoMGNERGA for Wave-I 5. Presentation onReport MGF-5 Status of Pending Flagged Asset 6. Presentation onReport MGF-6 Status of GeoMGNREGA Training for Wave-I and Wave-II 7. Presentation on Report MGF-7:Targets & Achievement of Wave-I i.e.out of total of 10 lakhs successful Geotagged Assets	By **GWG Chairman** (GeoMGNREGA Working Group)	10:10 AM
3	Final status report on Smoke Testing & Demonstration of solution	Deputy Director (NRSC)	04:00 PM
4	Final status report on Smoke Testing and Asset Management Functions	NIC (DoRD)	04:30 PM
5	Final preparedness status of Wave-I and Wave-II	Director (MGNREGA)	04:40 PM
6	Address by Joint Secretary (MGNREGA)	JS (MGNREGA)	05:00 PM
8	Vote of Thanks	Director (MGNREGA)	05:25 PM

Monthly Monitoring Governance Frameworks
under GeoMGNREGA

Report MGF-1 :Status of Work to Asset Generation for Wave-I				
Status as on:				
1	2	3	4	5
S.No.	District	Total No. Work Completed Wave-I	Total No. of Assets Id Generated in NREGASOft	Percentage Conversion

Report MGF-2: Status of Asset to Geo-tagging conversion for Wave-I				
Status as on:				
1	2	3	4	5
S.No.	District	Total Completed Works	Total Accepted Geotags	Percentage success

Report MGF-3 Status of Moderation in Geotag for Wave-I				
Status as on:				
1	2	3	4	5
S.No.	District	Geotags Attempted	Geotags Accepted	Percentage success

Monthly Monitoring Governance Frameworks
under GeoMGNREGA

Report MGF-4 Status of Registration of GeoMGNERGA for Wave-I				
Status as on:				
1	2	3	4	5
S.No.	District	No. of GP and Blocks	No. of Registration	Percentage success

Report MGF-5 Status of Pending Flagged Asset		
Status as on:		
1	2	3
S.No.	Dristrict	No. of Pending Flagged Assets

Report MGF-6 Status of GeoMGNREGA Training for Wave-I				
Status as on:				
1	2	3	4	5
S.No.	District	Total No. of Officials to be Trained (Block+ GP)	Total No. of Officials Trained (Block + GP)	Percentage

Monthly Monitoring Governance Frameworks
under GeoMGNREGA

Report MGF-7 GeoMGNREGA Targets and Achievement				
Status as on:				
1	2	3	4	5
S.No.	District	Targets Geotags	Achievements of Accepted Geotags	Percentage

List of Participants for Final Review Meeting on GeoMGNREGA
to be held on 25th oct 2016

S.No.	Name	Designation	Email	Mobile No.
1.		Principal Secretary / Secretary		
2.		Commissioner MGNREGA		
3.		SGNO		
4.		Other (designation)		

GeoMGNREGA Wave-I Targets
25th September 2016 to 24th October 2016

S. No.	State	States / UT Target	Districts	Districts Target
1			South Andaman	193
2	Andaman & Nicobar	581	North & Middle Andaman	294
3			Nicobar	94
4	Arunachal Pradesh	444	West Kameng	245
5			Tawang	171
6			Anjaw	28
7			Goalpara	2255
8	Assam	8909	Morigaon	5104
9			Dibrugarh	1550
10			Nalanda	7640
11	Bihar	13380	Arwal	1853
12			Munger	2634
13			Sheikhpura	1253
14			Balod	5124
15	Chattisgarh	12445	Raipur	3776
16			Durg	3545
17			Patan	3223
18			Bhavnagar	1279
19	Gujarat	9705	Navsari	3820
20			Porbandar	965
21			Jamnagar	418
22			Yamunanagar	1922
23	Haryana	3169	Panchkula	1054
24			Gurgaon	193
25	Himachal Pradesh	14700	Sirmour	9117
26			Solan	5583
27			Ranchi	12991
28	Jharkhand	32936	Giridih	12909
29			Bokaro	7036
30			Chitradurga	35142
31	Karnataka	119070	Hassan	26710
32			Chikkaballapura	16462

S. No.	State	States / UT Target	Districts	Districts Target
33			Belgaum	40756
34			Wayanad	12951
35	Kerala	64956	Thiruvananthapuram	32653
36			Malappuram	19352
37			Sehore	6638
38			Bhopal	2843
39	Madhya Pradesh	49927	Raisen	11273
40			Harda	3135
41			Betul	26038
42			Nagpur	7298
43			Amravati	14391
44	Maharashtra	37506	Aurangabad	3840
45			Nashik	4495
46			Pune	3357
47			Thane	4125
48	Manipur	3369	Imphal East	956
49			Senapati	2413
50	Meghalaya	2360	Ri Bhoi	1697
51			Jaintia Hills	663
52	Mizoram	2186	Champhai	1133
53			Kolasib	1053
54	Nagaland	3124	Kohima	2586
55			Peren	538
56			Kendujhar	8038
57	Odisha	27366	Angul	5479
58			Cuttack	5128
59			Nabarangapur	8721
60			Mansa	1088
61	Punjab	3549	Fazilka	2022
62			Tarn Taran	439
63			Jhalawar	7721
64	Rajasthan	41102	Baran	5234
65			Dholpur	3076
66			Udaipur	25071

S. No.	State	States / UT Target	Districts	Districts Target
67	Sikkim	1630	South Sikkim	1189
68			North Sikkim	441
69			Kanchipuram	25857
70	Tamil Nadu	52071	Ariyalur	10184
71			Tiruppur	11336
72			Theni	4694
73	Telangana	152721	Rangareddi	57513
74			Medak	95208
75	Tripura	66426	West Tripura	41074
76			Sepahijala	25352
77			Sant Kabeer Nagar	22169
78			Agra	10278
79			Barabanki	38397
80	Uttar Pradesh	129910	Jhansi	18340
81			Mahoba	8512
82			Saharanpur	14043
83			Varanasi	18171
84	Uttarakhand	12155	Haridwar	4413
85			UDAM SINGH NAGAR	7742
86	West Bengal	134304	24 PARGANAS (NORTH)	92603
87			Hooghly	29414
88			Alipurduar	12287

19. Invitation to States GeoMGNREGA event of GeoMGNREGA dated 28 October 2016

No. M-11011/02/2016-RE-III (Part-I)
Government of India
Ministry of Rural Development
Mahatma Gandhi NREGA Division
GeoMGNREGA ⚓

Krishi Bhawan, New Delhi
Dated: 28th October, 2016

To,

Principal Secretaries/ Secretary of all States / UTs
Department of Rural Development/ Panchayati Raj (In charge of MGNREGA)

Subject : Nomination for the Launch event of GeoMGNREGA on 24th November 2016

As you are aware that GeoMGNREGA has been launched in the Wave–I Districts w.e.f. 1st September 2016 and we have achieved significant progress with your cooperation. Vide this office letter even number dated 29th August 2016, it was informed that Geo tagged assets will be made available for public viewing after the resolution of issues pertaining to assets mapping, geo coordinates, picture validation and data consistency at your level. The reasonable time was given to each state to constitute GeoMGNREGA Working Group by including Wave–I Districts officials.

It has now been decided to make available geotagged assets available for public viewing. **Hon'ble Minister for Rural Development is likely to announce the rollout of GeoMGNREGA in the event organised by MoRD at Vigyan Bhawan on 24th November 2016.**

Your Pioneering Districts have played vital role in finalisation of the robust solution for GeoMGNREGA. The Ministry would like to invite officials from your state to be present during the event who were part of the Pioneering Districts.

It is requested to kindly nominate total five officials out of Pilots and Wave–I Pioneering District (GeoMGNREGA Working Group/ State GIS Nodal Officer (SGNO)/ District GIS Nodal Officer (DGNO) / GIS Pioneering District Champions (GPDC)/ MGNREGA Spatial Enumerator (MSE) / GIS Asset Supervisor (GAS) of GIS Pioneer District Testing Sites). All GIS MGNREGA Regional Resource Persons (GMRRP) should be also be nominated to attend as the Ministry would like to acknowledge their efforts.

The list of **total six officials** nominated to attend the event in the attached format may be sent to the Ministry on or before **10th November 2016** over email only at team@geomgnrega.in. Invitation card will follow on receipt of nomination. The agenda is enclosed.

Looking forward to your active participation for the 'Rollout Event' of GeoMGNREGA.

Aparajita Sarangi 28/10/16
(Joint Secretary, MGNREGA)

Nominations
for attending GeoMGNREGA Launch Event on 24th November, 2016

State:

Name	Designation	Designation under GeoMGNREGA	Phone Number	Email

14. Acronyms & Definitions

Acronym	Full	Description
GIS	Geographic Information System	Database for spatial and non spatial data
MoRD	Ministry of Rural Development	A branch of the Government of India, is entrusted with the task of accelerating the socio-economic development of rural India
NRSC	National Remote Sensing Centre	Monitoring using satellite data, Spatial and thematic maps, part of Indian Space Research Organisation
CGARD	Centre for Geo-informatic Applications in Rural Development	Design and develop Geomatics Applications for Rural Development Sector and develop the skill and knowledge levels in Geomatics technology and tools among the development functionaries from the Government
NIRD&PR	National Institute for Rural Development and Panchayati Raj	Indian institute for research in rural development
ISRO	Indian Space Research Organisation	The space agency of the Indian government
GPD	GIS Pioneer Districts	First District where GIS will be implemented
GPDTS	GIS Pioneer District Testing Site	First Gram Panchayat selected within GPD for PILOT execution of GIS application
GPDT	GIS Pioneer District Tester	Gram Panchayats functionaries working MSE and GAS in GPDTS
GPDC	GIS Pioneer District Champion	Nominate by GPD, one resource person from each Block, he/she will in-turn train all the GRS/ Technical Assistants/ PO of their respective District
GPSTD	GIS Pioneer Testing Site District	
GPTSB	GIS Pioneering Testing Site Block	

Acronym	Full	Description
GPTSG	GIS Pioneering Testing Site Gram Panchayat	
RRP	Regional Resource Persons	Selected by SIRD/NIRD&PR, to be first trained in MGNREGA GIS under Training of Trainers(ToT) in Stage-2.
PMU	Programme Management Unit	PMU is a group to ensure effective implementation and monitoring
MSE	MGNREGA Spatial Emulator	At Gram Panchayat level, who will capture the asset photographs with GPS location
GAS	GIS Asset Supervisor	At Block level, who will validate and approve the asset photograph
DGNO	District GIS Nodal Officer	At District Level, coordinate and monitor the implementation
SGNO	State GIS Nodal Officer	At State Level, Coordinate and monitor the implementation
NREGASoft		MIS for MGNREGA
NIC	National Informatics Centre	
SIRD	State Institute of Rural Development	Autonomous Institute under State Government for Training & Research in Rural Development
GRS	Gram Rojgar Sevak	At Gram Panchayat level, official manages the MGNREGA work
PO	Program Officer	At Block level, official manages the MGNREGA work.
PERT	Program Evaluation Review Technique	To find the critical path for project management.
GANTT	Horizontal chart bar chart to monitor the progress of programme.	
TA	Technical Assistant	

GEOMGNREGA

NIRDPR

CGARD

National Institute of Rural Development and Panchayati Raj
Ministry of Rural Development, Government of India
Rajendranagar, Hyderabad – 500 030
http://www.nird.org.in