

**NOTICE INVITING EXPRESSION OF INTEREST FOR
INTRODUCING SMART CARD AND HANDHELD DEVICES
UNDER NREGS, KERALA**

Expression of Interests are invited from interested firms / Service Providers, which are currently in the field of ICT based applications for implementing a **pilot project for introducing Smart Card and handheld devices** under NREGS, Kerala.

The last date for submitting the Expression of Interest is **5th June, 2009 at 3 PM**. Further details of the project are available at the following web sites.

www.crd.kerala.gov.in

www.lsgd.kerala.gov.in

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COMMISSIONER FOR RURAL DEVELOPMENT
COMMISSIONERATE OF RURAL DEVELOPMENT

GOVT. OF KERALA

Notice No.44503 /NREG Cell/2008/CRD

Dated: 22-5-2009

LMS Compound, Palayam, Thiruvananthapuram – 695 033

**INVITING EXPRESSION OF INTEREST
FOR THE IMPLEMENTATION OF ICT PILOT PROJECT UNDER NREGS IN
KERALA**

1. Background

The Govt. of India has launched an ambitious public employment programme by enacting a legislation called National Rural Employment Guarantee Act, 2005, (NREGA) for the enhancement of livelihood security of the households of rural areas of the country, by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual labour. It is a massive exercise to monitor the implementation of the programme in a systematic way. For this purpose, the National Informatics Centre (NIC) has developed software for on-line monitoring of the scheme throughout the country. For effective implementation and monitoring of the programme, the GOI has decided to use various tools available under ICT with a view to minimizing human interface in the implementation process.

2. Present process of implementation of NREGS is given below:

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| • Receiving Applications from the job seekers at GP level | Manual |
| • Verification / registration | Manual |
| • Issue of job card | Using pre-printed cards |
| • Preparation of Shelf of Projects | Manual |
| • AAP / labour budgeting | Manual |
| • Work identification, estimation, issue of Administrative Sanction (AS) & Technical Sanction (TS) | Manual |
| • Demand for work from job seekers | Manual |
| • Work allotment | Manual |
| • Work execution | |
| ○ Attendance / muster roll | Manual |
| ○ Measurements | Manual |
| • Partial | |
| • Final | Manual |
| • Bill preparation | Manual |
| • Wage payment to workers' bank a/c, Post office account | Manual |
| • Money withdrawal by workers | Manual |

3. The Pilot Project

In the pilot project it is proposed to minimize human interface wherever possible and bring maximum transparency and quick delivery of services. As per the Act, it is the responsibility of the authorities to give job within 14 days of receipt of written demand of the jobseekers for employment. If the authority fails to meet this time limit for providing job, the jobseekers are eligible to get unemployment allowance. Moreover, if the authorities are unable to provide job within 5 km radius of the jobseekers house, it is mandatory to give 10% of the wage towards travelling expenses. The marking of attendance, should be at the work site only. Even though minimum wages per day is fixed, the payment will be based on quantity of work delivered by the workers.

The Pilot Project will be implemented in 5 Village Panchayats of Alathur Block of Palakkad District and 5 Village Panchayats in Mananthavady Block of Wayanad District. However the pilot will be tried out in one Village Panchayat in Wayanad District before rolling out to the remaining 9 Village Panchayats.

The following activities are suggested in the pilot project.

- Receiving applications from the job seekers - Manual
- Verification by officials / CDS
 - Recording of location of house using GPS
- Registration & Issue of Biometric Smart Card, including capture of personal information (including biometric), printing and personalisation (brief specification of Smart Card in Annexure 2)
 - Multi purpose Biometric Smart Card proposed
 - Provisions for on line & off line processing
 - Linking with Insurance (RSBY/AABY), Social Security Pensions etc. at a later stage
- Preparation of Shelf of Projects
- AAP / Labour Budgeting
- Work identification
 - Preparation of estimates - using software
 - Administrative Sanction
 - Technical Sanction
 - For making payments on a time bound manner, it is suggested to Classify the works as follows:
 - Category – A
 - Less technical

- Measurements by authorized persons (CDS/Supervisor)
 - More than 50% of the work falls under this category.
- Category – B
 - Medium technical inputs required for measurement.
 - Measurements by overseers /Authorized technical persons
 - About 30% of the work falls under this category.
- Category – C
 - Technical Inputs required for measurement
 - Measurements by Engineering staff / Barefoot Engineers
 - Below 20% works may fall under this category
- Demand for work
 - Recording by Biometric Smart Card - Using machines made available at selected places / handheld devices.
 - Issue of dated receipt.
- Work allotment
 - Taking care of 14 days limit
 - Within 5 km of the place of residence of the worker or else 10% additional wages towards travel expenses
- Work execution
 - Workers will mark attendance through biometric authentication system
 - The device will have finger prints of workers of that Panchayat
 - The location of attendance will get captured through the GPS device attached
 - The device will synchronize with main system through GPRS
 - Muster roll preparation

- Measurements
 - Partial or final
 - Based on category of works
 - Calculation and releasing of payment
 - Weekly/ fortnightly to the bank a/c of the workers electronically
 - Withdrawal of amount by the workers
 - Tie-up with banks
 - Withdrawal using ATM cards
 - In unbanked areas payment can be made at the doorsteps
 - No additional cost to workers
 - Payment details – printouts
4. Activities Suggested in nutshell:
1. Attaching geographical tag to all households registered for job.
 2. Attaching geographical tag to all works proposed.
 3. Capturing of all necessary personal information of the registered job seeker including biometric information and issue of Multipurpose Smart Card (including printing and personalisation) which can be processed online as well as off line applications.
 4. Design of works, estimate preparation etc., using Engineering software
 5. Provision for recording of job demand by Biometric Smart Card at designated locations (say Village Panchayat office, Akshaya Centres etc.) and issuing acknowledgement electronically.
 6. Work allotment within time-limit and locations. If not, automatically initiate remedial measures prescribed in the Act. (Unemployment allowance, travel allowance etc)
 7. In the case of work allotment, the software should track the registration of workers in a particular area and the work availability in that particular area (within 5 km radius). Provision

should be there to generate warning messages /reminders to take care of this situation.

8. Recording of attendance at the work site with GPS information.
 9. Inputting of data at the time of work measurements (partial/final) which can be used for test checking and final bill preparations
 10. Bill preparation (Partial & Final)
 11. Electronic transfer of wages to the A/c of workers
 12. Arrangements for using ATM Card for withdrawal of money (zero balance a/c).
 13. Reports / reminders / warning message generation at each stage
 14. Integrating the database with present NREGS MIS developed by NIC.
 15. Scaling up the Pilot project to State level / National level by incorporating various suggestions evolved at the time of piloting the project in other states.
 16. Documentation at various stages of processing
 17. Training to officers and field staffs
 18. Identification of suitable hardware / software and its installation
 19. Implementation support and trouble shooting, O & M
5. The Firms should have -
1. Operational Experience in the field of Biometric Smart Card Issue and its management.
 2. Experience in the field of GIS based applications.
 3. Software development / customization facilities/tie ups with reputed firms
 4. Hardware supply and maintenance facilities/ system integration experience
6. Documents to be submitted with the EoI:
1. Details regarding the constitution of the firm
 2. Legal status
 3. Audited accounts of the firm for the past 2 years

4. Documents proving past experience – with details of project, contact person, etc.
5. Details of other firms partnering in this process, if there is a consortium and details of the tie-up

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Brief specification of equipment

Smart Cards

- Contactless smart cards conforming to international standards (ISO/IEC 14443 and ISO/IEC 7816)
- Reading only by mutual authentication
- Encryption of communication should be possible
- Strong device security (against duplication, etc.)
- Provision for selectively providing information as per the authentication of the requestor
- Support for information privacy
- Information security and privacy policy should be implemented by the issuing agency
- RF reading distance of maximum about 8 to 10 cm (Should not read beyond 10 cm)
- Provision for multiple applications and maintaining security between applications
- Suitable for adopting the EMV standard for banking transactions
- Provision to incorporate Government standards for government data (brought out by BIS or e-Governance Standards of DIT, GoI – such as **SCOSTA, ...**)
- 32 KB minimum capacity

Handset for marking the attendance transaction at work site

- Handheld, battery operated, light weight device
- GPRS/ CDMA wide area connectivity
- Rechargeable battery (preferably Lithium) with backup of at least 4 hours for normal operation
- GNSS (such as GPS) based facility for determining latitude and longitude at which the transaction takes place, with accuracy of at least 10 m
- Integrated or separate device for reading smart card (contact-less/ contact) and fingerprint/ biometric
- The main unit and the peripherals should not be more than **3 separate units**
- Application software for identifying the worker with smart card and fingerprint, and capturing and storing the worker attendance details with the worksite and work name, ID, latitude-longitude, time, etc. and transferring to a central/ GP server. The memory should be sufficient for running the application and storing at least 10,000 records of attendance.

Handset for cash disbursement – would require approval/ ownership of bank

- Handheld, battery operated, light weight device
- GPRS/ CDMA wide area connectivity
- Rechargeable battery (preferably Lithium) with backup of at least 4 hours for normal operation – for handset and printer
- Integrated or separate device for reading smart card (contact-less/ contact) and fingerprint, Portable battery operated printer, preferably dot matrix/ impact type
- The main unit and the peripherals should not be more than **3 separate units**

- Application software for identifying the worker with smart card and fingerprint, and linking to the bank's payment system for disbursing cash at the location of the worker.

Kiosk for marking job request – expected to be positioned initially at the local governments, and later in more locations

- Computer for running the application software for recording job request
- Touch screen monitor for input of job requests – preferably 38 cm or bigger
- Smart card and fingerprint/ biometric reader for identifying the worker making the job request
- Printer (dot matrix/ impact type) for providing a job-request acknowledgement slip
- All these should be housed within an aesthetic, tamper proof enclosure (kiosk) which can be positioned for public access

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