# e-District Project in Kannur & Palakkad Districts of Kerala (Phase I - Certificate Services)

e-District is a mission mode project of Department of Information Technology, Government of India under NeGP. Kerala State IT Mission (KSITM) is the State Designated Agency (SDA) for the project implementation in Kerala. The Government has chosen Kannur & Palakkad districts for the pilot implementation of the project.



**G.JAYAKUMAR** Technical Director NIC Kerala jayakumar.g@nic.in



base documents for NIC, prior to sys-

tem study and design. NIC has submitted the project proposal after

analysis of the backend computeriza-

tion of participating departments.

Necessary changes have been made

in the to-be document based on

input from NIC during the system

study and based on the SRS wherever necessary. The to-be document has addressed necessary BPR.

Government Order was issued to

introduce the digitally signed certifi-

Government has constituted a state

project committee chaired by Chief

Secretary, State level technical com-

**PROJECT MONITORING** 

COMMITTEES

cates.

NIC Official is a member of each of the above committees. Thus NIC is involved in the overall project visioning, guidance and monitoring. Additionally, NIC has the role of software developer. The application software for the project has been designed and developed by NIC Kerala State Centre.

#### SOFTWARE FEATURES

**Common application form:** The project allows people to apply and obtain the 23 certificates online from any Common Service Centre (Akshaya Centres) in addition to the Village / Taluk Offices. The applicant should pay a fee of Rupees twenty out of which ` 10/- would go to the Akshaya entrepreneur and ` 10/-

## E-Gov Products & Services

would be remitted to the government. Digital authentication and signing: Digital Signature Certificates issued by NICCA have been allotted to Village/Taluk Officers for secured login and approving the certificates online.

The pdf certificate is digitally signed. The signed certificates can be printed and issued to the applicant from anywhere. This way, the public could avail the services from Akshaya Centres without going to the Government office and beyond office hours.

**Use of QR codes:** All certificates are generated in PDF format with embedded QR code (2D bar code).

**SMS integration:** Applicant's mobile number is captured during registration process as part of general details. A system generated SMS is delivered to the Applicant's mobile based on the change in application status. SMS will be generated during status changes like Application Processing, Application Return, Application Rejection, Application Approval and Application Cancellation.

**X-forms:** e-forms have been developed using X-forms technology for offline filling up of application whenever connectivity is not available. These forms can be saved separately and later uploaded to the database when connectivity is available.

**Database level verification:** Database verification is being provided during the application verification process. The databases of respective department will be searched and information retrieved. The scanned attachments need not be submitted along with the application, rather the key information need only to be entered. This feature is available with respect to following databases-Driving licence, Ration card, Election ID, eDistrict.

**Certificate Authenticity verification:** The certificates issued through eDistrict can be verified from anywhere by the following means.

- Through eDistrict web site by entering the certificate number
- Through mobile handset, by focusing on the QR code and retrieving details online.

#### **BENEFITS TO CITIZEN**

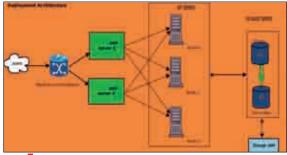
By the implementation of eDistrict, the citizens are the first to be benefited. The major advantages includes

 Availability of CSCs out of the offices hours enables the citizen to apply and obtain certificates at his own convenience, without disturb-

ing his routine working hours and without forfeiting his wages.

- Single point of contact (CSCs) for availing services. Before implementing eDistrict, to obtain a certificate from the Tahsildar, the individual has to visit the village office and get the verification report first. This has to be taken to the Tahasildar to get the certificate. He may have to visit multiple times at the Taluk and Village office. On each visit he has to forfeit one day wage as these offices function only 10 AM to 5 PM.
- The citizen has the facility to apply for a certificate from any available CSCs in the State. This enables him to visit a CSC near to his work place.
- The citizen need not have to bother about the availability of the Village/ Taluk officer to get his certificates. Earlier the citizen often required to have multiple visits to the Village offices as the officers may be busy or out of the office during the visit. The citizens get their certificates as per the citizen charter. The system helps to avoid unnecessary delays in issuing the certificates.

- Only one common application is required to be submitted by the person for any type of certificate.
- One time registration process enables, to retrieve past data and saves time when applies for multiple certificates and repeated requests.



Deployment Architecture

# DEVELOPMENT & DEPLOYMENT

It was decided to use open source technology for the eDistrict software development in line with the policy of Government. eDistrict application has been developed in J2EE platform and hosted at the State Data Centre. The hardware infrastructure includes two Web Servers on NLBS, three application servers (cluster) and two database servers configured as primary and secondary which are replicated. As part of the project, all Village and Taluk offices of Kannur and Palakkad are provided with necessary infrastructure including connectivity. Open source software is used in the client PCs in Village offices and Taluk offices. KSWAN connectivity is used wherever feasible and VPN over broadband made available wherever KSWAN is not feasible.

### For further information

**DR. K. SANTHANA RAMAN** State Informatics Officer NIC Kerala State unit CDAC Building,Vellayambalam Trivandrum- 33 Ph: 0471-2729894 sio-ker@nic.in