

National Awards for e-Governance 2014-15

State-wide rollout of e-District Kerala

Award Specific Application Form- Outstanding Performance in Citizen-Centric Service Delivery

I. OUTSTANDING PERFORMANCE IN CITIZEN-CENTRIC SERVICE DELIVERY

1. Coverage –Geographical and Demographic

(i) Comprehensiveness of reach of delivery centres

The citizens can avail the services online by accessing the portal <https://edistrict.kerala.gov.in>. Apart from that the citizens can also avail the services by visiting any of the Akshaya CSCs, spread across the length and breadth of all the districts of the State. On an average, there are around 200 Akshaya CSCs per district.

(ii) Number of delivery centres

The delivery is made available through online and also is available through more than 2400 Akshaya Centres which are spread across the length and breadth of the State, covering all the districts. Presently the project is implemented in all the districts of Kerala. Akshaya Centres are spread across in such a way that there is at least one Akshaya Centre in each of the Panchayats. All the services envisaged under the e-district project are delivered through these Akshaya Centres apart from the Government offices.

(iii) Geographical

- | | |
|--|---------------------------|
| (a) National Level – Number of States covered | - Nil |
| (b) State/UT Level – Number of Districts Covered | - 14 |
| (c) District Level – Number of Blocks Covered | - 152 (and 1650 Villages) |

Please give Specific details

Presently the services under the project is implemented in all the 14 districts of Kerala. More than 1650 Government Offices are processing various applications daily for which the application submission and delivery can be made either through online or through more than 2400 Akshaya CSCs of the State.

(iv) Demographic spread(% of population covered)

100% of the population are covered under the project

2. Situation before the initiative(bottlenecks, challenges, constraints etc. with specific details as to what triggered the organization to conceptualize this project)

Before the implementation of the initiative, a citizen can avail the service only by visiting the respective office or by visiting the multiple offices during office hours. The applications were not processed on a First in First out (FIFO) basis and also the citizens have to wait in long queues to avail the service. The citizens had to also go to office multiple times for obtaining one certificate or making the payments and in cases of

certificates, Public Grievance redressal etc. he has to travel to multiple offices multiple times depending upon the nature of the service.

For the officials also, there were a lot of challenges such as the officials will have to manually sign a lot of certificates during the office hours and they could not focus on other productive works. The retrieval of the various services were also tedious and cumbersome. A lot of time was spent on the field verification also. With the e-district project, the officers were given laptops and the officers could process and approve the applications even during non-working hours and also on holidays.

3. Scope of Services/Activities covered (Extent of e-enablement in terms of number of services, extent to which steps in each service have been ICT-enabled)

3.1. Extent of e-enablement in terms of no. of services

Presently 24 different types of high volume citizen-centric Certificates coming under the Revenue Department are being delivered under the e-district State-wide rollout project in all the districts.

The online filing of application for information under Right To Information (RTI) is also made available for various departments such as KSITM.

Online Public Grievance Redressal services are also made available for various offices such as various District Collectorates.

Apart from the above, the following types of various payment services are also made available online:

- Utility payments of BSNL, Kerala State Electricity Board & Kerala Water Authority,
- Various fee payment services of Kerala University, Mahatma Gandhi University & Calicut University
- Various fee payments of Electrical Inspectorates
- Various fee payments of Motor Vehicles Department
- online e-challan payment for Police Department
- Online fees for Labour Welfare Department
- Online fees for Cultural Welfare Department

Various online Revenue Court Cases services for the RDO/ADM's court is also proposed to be made available under e-district from September 2014 onwards.

3.2. Extent to which steps in each service have been ICT enabled

The 24 certificates, online RTI and PG services are fully automated without any manual processing involved. Right from application receipt till the certificate/output delivery, the entire workflow is fully automated. Application submission and the delivery can be made either through online or through visiting any Akshaya CSC. The citizen needs to undergo a one-time registration for availing any of the e-district services and is provided with a unique e-district id. The citizen can use this unique id for availing any service from next time onwards. Once the registration is done either through online or by the Akshaya Operator, the application can be submitted online and the same shall be forwarded to the processing/verifying officer. The online payment gateway offered by NDML consisting of the internet banking, debit card, credit card and IMPS facilities of more than 60 banks are also enabled. The Aadhaar database is integrated for authentication for the purpose of user creation. The processing/verifying officer shall carry out the processing and forwards the same to the approving authority. The verifying officer can verify the application by checking the online databases of ration card, SSLC data and driving license, as these databases are integrated with e-district portal for real-time data verification. The approving authority shall approve/reject the application using the digital signature. Once the application has been approved/rejected by the approving authority, the citizen gets the notification via sms and the citizen can take the print out of the application either by logging into the e-district portal using the application no. or can visit any Akshaya CSC and can take the print out of the certificate/document. The end-to-end activities starting from the receipt of application till the generation of the certificate/output is carried out in an automated manner.

The various payment services are also fully automated. The databases of BSNL, KSEB, Kerala Water authority etc. are integrated with e-district for data exchange. After the citizen logs into the e-district portal and selects the relevant payment option and after entering the details (such as telephone no., consumer no. etc.), the system populates the amount to be paid, from the respective departmental database. The citizen can make the payment online either using the internet banking, debit card, credit card and IMPS facilities of more than 60 banks online.

4. **Stakeholder Consultation** (Give details about type of stakeholders consulted, number of stakeholders consulted, stages at which stakeholder input was sought, any user satisfaction study done etc.)

Extensive stakeholder consultations were involved right from the project conceptualization till the pilot roll-out and the stakeholder consultations are still going on for the state-wide roll out of the project. The details of the stakeholder consultations at the various stages of the project are summarized in the following table:

Project Stage	Types of Stakeholders consulted and Nos.	Objectives
Service Categories/Service Identification	<ul style="list-style-type: none"> IT Secretary and other Departmental Secretaries/ Directors (10-15 Nos.) District Collectors of Pilot Districts (2 Nos.) Departmental Heads of Pilot Districts (15-20 Nos.) Citizens of Pilot districts 	<ul style="list-style-type: none"> Finalization of service categories Finalization of services coming under each service category
Requirement Gathering	<ul style="list-style-type: none"> Departmental Heads of pilot districts (15-20 Nos.) Section Heads/Clerks of pilot districts (40-50 Nos.) 	<ul style="list-style-type: none"> 'As-Is' Process Mapping Business Process Re-Engineering (BPR) and 'To-Be' Process Mapping Requirement of Digital Signatures
Application Development, testing and deployment	<ul style="list-style-type: none"> Project Consultants & Application Development Agency (Around 15 Nos.) STQC (2 Nos.) 	<ul style="list-style-type: none"> Finalization of Functional Requirement Specifications (FRS) Finalization of System Requirement Specifications (SRS) Application Development and Testing
Hardware Procurement	<ul style="list-style-type: none"> Technical Committee (consisting of 10 members) 	<ul style="list-style-type: none"> Finalization of Request for Proposal(RFP) for selection of hardware vendor
User Training	<ul style="list-style-type: none"> District Collectors of all districts (14 Nos.) Departmental Heads of 14 districts (15-20 Nos. per district) 	<ul style="list-style-type: none"> Finalization of Training Plan including type of training, content of training, training duration, venue etc. Finalization of the departmental staff to be trained
Go-live of project in districts	<ul style="list-style-type: none"> IT Secretary (1 No.) District Collectors of all districts (14 Nos.) 	<ul style="list-style-type: none"> Finalization of Project launch activities in the districts

An impact assessment study was carried out under the project by the project consultants.

5. Strategy Adopted

(i) The details of baseline study done

The Consultants were deployed for the identification and prioritization of the services to be covered under e-district project, the consultants had prepared the 'As-Is' documentation covering the existing scenario and based on the As-Is study & analysis, the various bottlenecks in the system were identified. The consultants had prepared the Business Process Re-Engineering (BPR) report and based on the BPR interventions, the consultants had further prepared the Function Requirement Specifications (FRS) for the e-district application to be developed. The input as well as the output formats were also standardized during the study. The System Requirement Specification (SRS) for the e-district application was made based on the FRS and the e-district application was

developed based on the SRS. The consultants were also involved in each stage of the development and testing of the application.

(ii) Problems identified

The key problems identified during the baseline study were the following:

- Lack of unified formats: Different districts/offices were using different formats of certificates, wanting different types of supporting documents etc.
- Retrieval of data was extremely difficult as the officers have to check manual user records
- There were no facilities to check the genuinity of the certificates issued
- The citizens have to travel multiple offices, multiple time to avail the services and to check the status
- No proper service level agreements were in place to deliver the services

(iii) Roll-out/implementation model

The Head, KSITM is managing the implementation of the project at the State level. There is a State Program Management Unit (SPMU) coordinating the rollout of the project at the district levels. The District e-Governance Society(DeGS)at the district level is managing the project implementation at the district level. There is a nodal officer appointed at the district level in each of the districts to co-ordinate the e-district related activities at the district level. There is a system administrator at the district level for user management at the district level.

(iv) Communication and dissemination strategy and approach used

The key communication and dissemination strategy under the e-district project involved the following:

- Monthly Performance Reports (for each district and for the State)
- Progress Monitoring Dashboards
- Orientation Workshops
- Standard Operating Procedures
- Legal amendments
- E-Mail Communications/News Letters

6. Technology Platform used

(i) Description

e-District software is developed at State Level by National Informatics Centre (NIC). Web technologies are used for the solution. The software has been developed using

J2EE technologies. Platforms include Spring framework, JBoss Application Server, PostgreSQL RDBMS, Hibernate, JasperReports, XForms etc. Application development team is in place at Thiruvananthapuram. The deployment architecture include two high end database servers used as primary OLTP servers for e-district and FREES (payment) and 2 low end database servers are used as secondary servers (streaming replication) for reporting purposes. Web servers (apache) on NLBS and App servers (Jboss cluster) are also configured. The Solution is hosted at the State Data Centre. The hardware and software technologies used are sufficient to support the rollout of additional services in more geographies.

(ii) Interoperability

The overall solution is NeGP compliant and has been prepared based on the various standards on inter operability, data exchange, security, language localization framework , as issued by the Department of Electronics and Information Technology (DeitY), GoI, from time to time.

(iii) Security Concerns

The e-district application is hosted in a secured environment in the State Data Centre which has modern State-of-the-Art security measures. Adequate security techniques are used in the e-district application. The web portal is having Secured Socket Layer (SSL) Certification. Also, separate user ids and passwords with the required access rights are provided for each user such as the CSC operator, processing authority, approving authority etc. Other security measures used in the project are use of QR Codes in certificates, Online Certificate Verification facilities, Use of Digital Signatures etc. Hence, there are no security concerns associated with the project.

(iv) Any issue with the technology used

Since State-of-the-Art modern technologies are used, there are no issues associated with the technology used.

(v) Service Level Agreements (SLA)

The Service Level Agreements for all the services are documented under e-district project and are strictly adhered to. The Service levels built in the e-district application is as per the 'Right to Service Act' for availing a particular service coming under a particular department. The workflow in the portal is also in line with the agreed Service Level Agreements (SLAs). The concerned authorities can also monitor and generate reports on the services which are delivered as per the SLAs and in cases where there is SLA breach and can take actions accordingly. It is also planned to implement auto-escalation mechanism in the portal as part of service level monitoring.

7. Citizen Centricity and relevance (Give, Feedback mechanism, Audit trails, Interactive platform for service delivery, need gap fulfillment etc.)

(i) Details about impact on effort and time invested by user

Before the implementation of the e-district project, a common citizen had to travel atleast three times for availing a service from a particular office, one for submission of application, one for tracking status and one for collecting the certificate. The average time for each travel was around 2 hrs. as the average distance to travel to the government office was 10-15 kms, thus taking a total of 6 hrs. for travel only to avail a particular service. Also, there was an average waiting time of around 2 hrs. at the office in each visit thus making the total waiting time of 6 hrs. for waiting. Thus, a citizen has to spend atleast 12 hrs. for availing a particular service.

After the implementation of the e-district project, a common citizen does not need to travel to the office as the facilities for online application submission and status tracking and online delivery are available. Once the certificate/output is approved, the citizen shall get the same notified through sms and the citizen can take the print out from the e-district portal, thus eliminating the need of traveling to the Akshaya CSC or office. The average time for application submission is 20 minutes and for status tracking/delivery 5 minutes, thus, reducing the average time for the entire service delivery to half an hour.

(ii) Feedback mechanism

If the citizen/official has any complaint or grievance, there is facility for him to reach the supporting personnel stationed at the State level. For the officials to report the hardware issues, there are system administrators positioned at each district and also there are state level system and database administrators. Any other project related issues which needs intervention at the district can be brought into the notice of the District level IT cell coordinators and the matters that require State level intervention can be brought into the notice of the Mission Co-Ordinator, KSITM. The list of the persons is provided in the e-district website itself and is also displayed at all Akshaya CSC outlets.

(iii) Audit Trails

Audit trails are maintained and the system maintains the login details with time stamp for each category of user such as the Akshaya CSC operator, processing authorities and approving authorities.

(iv) Interactive Platform for service delivery

The e-district public portal has facilities for application submission, making payment and downloading the output/certificate online by accessing the e-district portal, thereby ensuring a complete end-to-end interactive platform for service delivery. Moreover, the

verifying officials processing the applications at the backend could verify the applications online by checking other departmental databases in realtime, thus ensuring interactive platform even with other departmental databases.

(v) Need gap fulfillment

During the study, certain key gaps were identified such as lack of single window for obtaining multiple services, lack of unified formats of certificates, supporting documents etc. difficulty in retrieval of data, no facilities to check the genuinity of the certificates issued, the citizens have to travel multiple offices, multiple time to avail the services and to check the status, no proper service level agreements in place etc.

As part of the BPR interventions, the entire service delivery mechanism was made online with minimal processing, the formats for certificates, supporting docs. Were standardized and the SLAs were defined with online escalation mechanism. Online certificate verification facilities were also made available and the online status tracking mechanism, online delivery etc. were also introduced as part of BPR. The BPR also included the integration of various databases to ensure authenticity and save time.

8. User Convenience

(i) Service Delivery Channels (web, e-mail, sms etc.)

All the services under e-district can be availed online through web by accessing the link <https://edistrict.kerala.gov.in> The final output is sent through e-mail for RTI services, if the applicant had selected the mode of service delivery as e-mail. The sms alerts are sent at each stage of the application (processing, verification, approval etc.)

(ii) Completeness of information provided to the users

The various services provided through the e-district portal are available in the e-district website which is available in public domain and can be accessed by the citizens. The web portal provides detailed information on the various services provided under the project. Also the various application forms for availing various services are available for download. The portal also contains the various documents related to the project which describes the service levels for obtaining each service provided under the project. Also, every Akshaya CSC displays the services which are delivered under the e-district project, the supporting documents required to avail a service, the timelines for delivery of a particular service and even the service charges, charges for scanning, printing etc.

(iii) Accessibility (time window)

Prior to the launch of the project, the time window for obtaining the services were restricted to the office hours in which the particular service is available. After the launch of the portal, these services are available 24 hrs. round the clock and in holidays. The Akshaya Centres are also available from 8.00 am to 8.00 pm.

(iv) Distance required to travel to access points

Before the implementation of the e-district project, the citizens had to travel an average distance of 10-15 Kms atleast 3 times (once for application submission, once to check status and once to get the certificate/output) for obtaining a service. For payment services, the citizens had to travel an average distance of 10-15 Kms at least once. After the implementation of the project, the citizen need not travel to the concerned office as the services can be availed directly through online.

(v) Facility for online/offline download and online submission of forms

The various application forms for availing various services are available for download. The applications can be submitted online after onetime registration. For payment services, the one-time registration is not mandatory.

(vi) Status tracking

The applicant can check the status of the application, by accessing the 'application status' section in the public domain of the e-District portal. Once the certificate/final output gets approved, the applicant can take the print out of the certificate also by accessing this link. For checking the status of payment transactions, the details can be found by checking the 'transaction history' section available at the user area after logging in.

9. Efficiency Enhancement

(i) Volume of transactions processed

From the start of the State-wide roll out (4th Dec. 2012, more than 78 lakhs of certificate transactions were carried out under e-district out of which more than 69 certificates were approved. More than 20 lakhs payment transactions were also carried out through e-district.

(ii) Coping with transaction volume growth

Apart from the ICT infrastructure procured during the pilot implementation, the entire ICT infrastructure (servers, system software storage, desktops, laptops etc.) was

augmented to meet the raising demand of the transactions. Online call logging mechanism was introduced for resolving the hardware and connectivity related issues and the 5 Handhold Supporting Engineers were also deployed in each of the districts for training and handholding support.

(iii) Time taken to process transactions

For Certificate services, the average time taken is 3 days, whereas for RTI, it is 30 days as applicable under the RTI act, for Public grievance services, the time taken for resolution is 15 days whereas for payment services it is Realtime.

(iv) Accuracy of Output

The accuracy of output is around 90% incase of certificates as out of 78 lakhs applications, more than 69 certificates were issued. For other categories also, such as payments, the accuracy is around 85%, as the e-payment gateway transactions are involved.

(v) Number of delays in service delivery

The average SLA is more than 85% for the certificates issued under e-district.

10. Cost to User (Give details about impact on service charge paid, travel cost, indirect cost incurred by the user etc.)

Before the implementation of the e-district project, a common citizen had to travel atleast three times for availing a service from a particular office, one for submission of application, one for tracking status and one for collecting the certificate. An average cost for one travel is around Rs. 300/- which includes the travel expenses and the loss of wage,(as the government offices are functional only from 10.00 to 5.00.) thus incurring an average cost of around Rs. 900/- to avail a certificate.

After the implementation of the e-district project, a common citizen need not travel as the applicant can take the print out of the final output/ certificate by accessing the 'application status' section in the public domain of the e-District portal.

11. Citizen Charter (Give details about presence of Citizen Charter describing standard/information on services and its adherence of service delivery etc.)

Every Akshaya CSC displays the services which are delivered under the e-district project, the supporting documents required to avail a service, the timelines for delivery of a particular service and even the service charges, the charges for scanning, printing etc. The citizen charter is displayed in the departmental offices also. The details are also displayed in the e-district portal.

12. Problem Resolution and Query Handling (Give details about availability of helpdesk, query resolution mechanism, single window resolution, interactive interface etc.)

For the citizens, the queries related to e-district can be registered in the Citizens Call Centre of the Government of Kerala. Presently, there is a dedicated person at the State level as the Single Point Of Contact (SPOC) for the queries related to e-district for the officials/citizens. Any e-district related queries/issues shall be attended and escalated, if required, by this SPOC to the concerned stakeholder. Apart from this, any project related escalation shall be handled by the Mission Co-Ordinator, KSITM, in charge of e-district at the State level. There is a dedicated team at the State level consisting of a System Administrator and a Database Administrator for handling queries related to technical issues, server performance issues and connectivity issues. The software related queries are also handled by NIC through the Mission Co-Ordinator at the State level. Also in each of the 14 districts, 5 BE/B.Tech graduates in Computer Science are deployed as Handhold Support Engineers (HSEs) for the necessary handholding support and field level issue resolution.

13. Privacy & Security Policy (Give details about security technique deployed, use of digital signatures, encryption etc.)

Adequate security techniques are used in the e-district project. Some of the key security techniques deployed under the e-district project are:

- Secured Socket Layer (SSL) Certification: The e-district portal has SSL Certification.
- Use of QR Codes in certificates : All certificates are generated in PDF format with embedded QR code (2D bar code)
- Online Certificate Verification: Any authority/citizen can verify the authenticity of the digital certificate by going into the e-district website or through mobile handset, by focusing on the QR code and retrieving details online.
- Use of Digital Signature Certificate: The approving authority approves or rejects an application using a Class 2 digital signature, issued by the NIC Certifying Authority(NICCA)/e-Mudra/N-Code etc.

14. Innovation (Give details on extent to which the service is unique compared to other similar services, impact on number of steps required, identification and renewal of bottlenecks/irrelevant steps etc.)

The e-district project is unique in the sense that the citizen can apply and avail the service without the need of visiting a government office. The service is available close to the doorstep of the citizen. Also, prior to the implementation of the e-district project, there are a lot of officials involved in the delivery of a particular service. For eg. Tapal section, section clerk, section head, verifying authority, approving authority etc. and

there is upward and downward movement of the file multiple times. But post e-district scenario, basically only 2 or 3 levels are involved and in certain cases where verification is involved, there is upto 4 levels (CSC operator, processing authority, verification officer & Approving Authority), without multiple upward and downward movement of files. In most of the cases, it is restricted to 2 levels (CSC operator and Approving Authority as the approving authority processes the application also).

Also, there are unique facilities of use of QR codes in certificates and there is facility for online verification of the certificate, which will ensure the authenticity of the certificate.

- 15. E-Inclusion** (Give details about impact on number of trips required, availability of local language interface, online submission of forms, accessibility for disabled people, length and breadth of services made available online)

Before the implementation of the e-district project, the citizens had to travel an average distance of 10-15 Kms atleast 3 times for a service. After the implementation of the project, the citizen has to travel either once or maximum only twice with an average distance of 5 kms (as there is atleast one Akshaya Centre in every Panchayat). With the online portal facilities in place, the citizen does not need to travel to the office.

The e-district portal also has a local language interface which supports Malayalam language. The portal content is available in Malayalam. There is facility to download the Malayalam font in the portal itself. Once the user downloads the font and installs the same in the system, he can view the content of the portal in Malayalam. The application forms are also available for download in Malayalam language. Presently, there is no special provision for the accessibility of the disabled people. It is planned to incorporate facilities in the portal with features for accessibility for disabled people.

Presently 24 different types of Certificates coming under the Revenue Department, online RTI and PG services and various fee payment services are being delivered under the project. These services are fully automated without any manual processing involved.

- 16. Sustainability** (Give details about sustainability w.r.t. technology used, user privacy, security of information shared-Digital signature/Encryption etc.), Organization (hiring trained staff, training etc.), financial (scope for revenue generation etc.)

e-District software is developed at State Level by National Informatics Centre (NIC). Web technologies are used for the solution. The software has been developed using J2EE technologies. Platforms include Spring framework, JBoss Application Server, PostgreSQL RDBMS, Hibernate, JasperReports, XForms etc. Application development team is in place at Thiruvananthapuram. The deployment architecture include two high end database servers used as primary OLTP servers for e-district and FREES (payment)

and 2 low end database servers are used as secondary servers (streaming replication) for reporting purposes. Web servers (apache) on NLBS and App servers (Jboss cluster) are also configured. The Solution is hosted at the State Data Centre. The overall solution is NeGP compliant. The hardware and software technologies used are sufficient to support the rollout of additional services in more geographies.

The user privacy is ensured at all levels under the project. The web portal is having Secured Socket Layer (SSL) Certification. Also, separate user ids and passwords with the required access rights are provided for each user such as the CSC operator, processing authority, approving authority etc. Also, the approving authority can approve/reject any application only affixing his digital signature.

There is a robust organization mechanism for the sustenance of the project. There is a dedicated Mission Co-Ordinator from Kerala State IT Mission (KSITM) for managing all e-district project related issues. There is a dedicated software development team from NIC and one system administrator and database administrator at the State level, two district level system administrators. A System Integrator (SI) is in place with proper SLAs defined for the supply and maintenance of the hardware. There is a District e-Governance Society (DeGS) in each of the districts for the successful monitoring and implementation of the project within the district as per the timelines. There are 3 Master Trainers who are deployed for managing the Change Management & Capacity Building in all the 14 districts. There are 5 BE/B.Tech Computer Science graduates as Handhold Support Engineers (HSEs) in each of the 14 districts for the handholding the government officials and the Akshaya CSC operators till the user reaches a comfort level in using the e-district application. The hiring of one e-District Manager per district is under process. Also, there is a National level Program Management Unit (NPMU) with two full time consultants for the monitoring of the project at the national level, a State Program Management Unit (SPMU) for the timely implementation and monitoring of the project at the State and District level with two full time consultants.

The training is being imparted to the Master Trainers and the Handhold Support Engineers (HSEs) by the software application System Integrator. i.e. NIC and the Master Trainers and the HSEs shall in turn train the officials and the Akshaya operators. There are three types of trainings are imparted in the district, which includes the awareness training, hands on training and a joint workshop involving both CSC operators and the government officials.

The e-district project has been implemented with a robust self-sustainable model in place to ensure the sustainability of the project to meet the recurring expenses. There is a service charge of Rs.17/- collected for delivering a service through the Akshaya CSCs. For the sustenance of the project, an application service charge of Rs.7/- is collected as government share which shall be used for the maintenance of the systems, going forward. Incase of service delivered through e-district portal also, a service charge of Rs.

10/- is levied per transaction towards the government share. This money collected as service charges is shared with District e-Governance Society (DeGS). DeGS would be able to sustain the projects and will be in a position to ensure sustainability of various future e-Governance efforts in the district with this fund. After the completion of the State-wide rollout of the project in March 2013, so far, around 90 Lakhs transactions have been carried out and around 7 Crores Rupees was generated as the transactional charges which shall be used for the sustainability of the project.

17. Number of users and services (Give details about frequency of services used in last 6 months, number of visitors, number of unique visitors, number of users etc.)

The transactions under e-district during the period 1st March 2014 to 31st August 2014 is given below:

Sl No.	Type of Certificate	No. of certificates issued (1 st Mar 2014 to 31 st Aug. 2014)
1	Caste Certificate	3,61,876
2	Community Certificate	2,065,80
3	Conversion Certificate	24
4	Dependency Certificate	1,255
5	Destitute Certificate	1,413
6	Domicile Certificate	5,230
7	Family Membership Certificate	16,783
8	Identification Certificate	764
9	Income Certificate	7,75,001
10	Inter-Caste Marriage Certificate	188
11	Legal Heir Certificate	702
12	Life Certificate	5263
13	Location Certificate	62,735
14	Minority Certificate	840
15	Nativity Certificate	2,29,444
16	Non-Re Marriage Certificate	7,146
17	One and the Same Certificate	2,14,108
18	Possession Certificate	6,11,522
19	Possession & Non-Attachment Certificate	35,425
20	Relationship	19,782
21	Residence	20,180
22	Solvency	187
23	Valuation	1,954
24	Widow-Widower	3,800
	Total	25,82,202

25	RTI services	31
26	Public Grievance Services	6
27	BSNL – Land phone Bills	98394
28	BSNL – Mobile phone Bills	29020
29	BSNL – Wireless phone Bills	8524
30	Calicut University	81020
31	MG University	52541
32	Kerala University	132377
33	Kerala Police Department	34
34	Kerala State Cultural Activists	1500
35	KSEB	136831
36	Kerala Water Authority	84542
37	Labour Commissionerate	8788
38	Motor Vehicles Department	33697
	Total	6,67,305

Till date, there are more than 40 lakhs visitors to avail the various e-district services out of which more than 32 lakhs users have availed the services in the last six months.

Also, there are certain unique visitors to see and understand the working model of e-district since its launch. The VIP visitors include the delegates from various other States.

Apart from the citizen who avail the e-district services, the major users of the system includes the Akshaya Operators and the departmental officials involved in processing/approval of the applications. Around 7200 Akshaya operators and around 3500 departmental officials uses the e-district system across the State and the numbers are on a rise consistently.

18. Result Achieved/ Value Delivered to the beneficiary of the project-(share the results, matrices, key learning's, feedback and stakeholders statements that show a positive difference is being made etc):

Some of the key statistics are given below:

- After the roll-out of the project, the certificates were issued in certain cases even in less than 1 minute
- More than 1/3rd of the applications were approved online within 24 hrs. of application submission
- Thousands of certificates were issued during non-working hours (at night) and also during the holidays.

(i) To organization

- 'Face lifting' as the image of the department in terms of citizen-centricity had grown positively in front of the public
- Could save lot of time for verification as online verification facilities are available
- Could generate reports online for various reporting purposes
- The senior officials could track the performance of the officers depending on the certificates issued, pending, issued within the timelines etc.

(ii) To Citizens

- Single window for availing multiple services
- Can submit application, make payment, check status and receive certificate/output online without visiting any office
- Savings in time and cost as they need not visit the office

(iii) Other Stakeholders

- Could check the genuinity of certificates issued online

19. Extent to which the Objective of the Project is fulfilled-(benefit to the target audience G2G,G2C,G2B or any other, size and category of population/stakeholder benefited etc):

Since the launch of the state-wide rollout of the e-District project , around 80 lakhs of transactions were carried out online through e-district project. While considering G2G benefits, the District Collectors could monitor the project centrally and it is known to them that who is performing well. The District Collector could ensure that the certificates are issued within the Service Levels. Also, the various institutions could check the genuinity of the certificate by logging into the e-district website.

20. Adaptability Analysis

(i) Measures to ensure adaptability and scalability

Kerala Information Technology (Electronic Delivery of Services), 2010 was published by the Government of Kerala which governs the delivery of e-services under e-district and gives legal backing to the online certificates issued. The amendments to this rule are being issued from time to time depending upon the demands from the department and from the public, to improve the performance of the services under e-district. The various Government Orders are also being issued by the IT Department, Government of Kerala for the efficient delivery of e-services under e-district. These amendments were shared with the various user departments who accepts these certificates, in order to avoid the non-acceptance of certificates. The necessary ICT infrastructure was scaled up to meet the raising demand of the usage and transactions during roll-out.

(ii) Measures to ensure replicability

The necessary orders were issued by the IT Department, Government of Kerala to notify the 'e-services' by the concerned departments so that the same could be delivered under e-district. Also, the software is built to have a generic workflow which allows easy replicability for the introduction of more services of similar nature on the fly.

(iii) Restrictions, if any, in replication and or scalability

There are no restrictions as of now, with respect to the replication and scalability, as far as the State-wide rollout of e-district project is concerned.

(iv) Risk Analysis

The risk analysis was carried out and the major risks and the mitigation measures identified under the e-district project included the following:

Sl No.	Risk identified	Mitigation Measure
1	The infrastructure to meet the raising demand	<ul style="list-style-type: none">• The servers during the pilot were augmented with high end servers to meet the raising demand• Adequate laptops and connectivity infrastructure was provided at the district level
2	Non-acceptance of online certificates by the Departments	Issue of the legal notification by the Government and circulation of the same to the concerned beneficiary departments
3	Dependency on one agency (for eg. Digital signature, connectivity etc.) for sustained service delivery	Empanelment of multiple agencies (for Digital signature issue, connectivity establishment etc.) to ensure sustained service delivery
4	Identification and resolution of issues pertaining the hardware	Online call logging mechanism for hardware, connectivity etc.
5	Ensure continuity of operations at all the offices	<ul style="list-style-type: none">• Deployment of Handhold Supporting Engineers (HSEs) for handholding the staff at districts• Monthly performance monitoring by the District Collectors
6	Lack of motivation to continue online processing	<ul style="list-style-type: none">• Awards and Certificates of Appreciation every month to improve performance

21. Comparative Analysis of earlier Vs new system with respect to the BPR, Change Management, Outcome/benefit, change in legal system, rules and regulations

BPR: As part of the BPR interventions, the entire service delivery mechanism was made online with minimal processing, the formats for certificates, supporting docs. Were standardized and the SLAs were defined with online escalation mechanism. Online certificate verification facilities were also made available and the online status tracking mechanism, online delivery etc. were also introduced as part of BPR. The BPR also included the integration of various databases to ensure authenticity and save time.

Change Management : There are 3 Master Trainers who are deployed for managing the Change Management & Capacity Building in all the 14 districts. There are 5 BE/B.Tech Computer Science graduates as Handhold Support Engineers (HSEs) in each of the 14 districts for the handholding the government officials and the Akshaya CSC operators till the user reaches a comfort level in using the e-district application. The training is being imparted to the Master Trainers and the Handhold Support Engineers (HSEs) by the software application System Integrator. i.e. NIC and the Master Trainers and the HSEs shall in turn train the officials and the Akshaya operators. There are three types of trainings are imparted in the district, which includes the awareness training, hands on training and a joint workshop involving both CSC operators and the government officials.

Legal system, rules and regulations : Kerala Information Technology (Electronic Delivery of Services), 2010 was published by the Government of Kerala which governs the delivery of e-services under e-district. The amendments to this rule are being issued from time to time depending upon the demands from the department and from the public, to improve the performance of the services under e-district. The various Government Orders are also being issued by the IT Department, Government of Kerala for the efficient delivery of e-services under e-district.

22. Other distinctive features/ accomplishments of the project:

- (a) The e-District Project, Kerala is the first e-district to be rolled out in the entire State across the country.
- (b) The e-district pilot project was awarded with the CSI-Nihilent Awards for the year 2011-2012
- (c) The e-district pilot project was also awarded with the e-Maharashtra Awards 2012.
- (d) After the pilot e-district launch, from the date of launch of the State-wide roll out, the e-District project was rolled out in all the 12 districts, within less than 3 months. This involved the launching of the project in around 1400 offices and 2000 Akshaya Centres after making available the requisite ICT infrastructure, establishment of network connectivity in around 1400 offices, issue of digital signatures to around 2000 officials and imparting training to around 4000 officials.