



## **e-DISHA Ekal Seva Kendra – Citizen Centric e-Governance**

Dharam Vir<sup>1</sup> and Ghanshyam Bansal<sup>2\*</sup>

### **ABSTRACT**

*The Citizen-Centric governance is aimed to meet the felt needs of the people, solve their common problems and redress grievances at their doorstep. e-DISHA ESK (Ekal Seva Kendra : Common Service Centers) initiative of Haryana Government is an effort towards creating a Citizen Services Network, a way to take the governance to the citizens and hence make it available even at the grass-root level. This is aimed to provide citizens access to information about government services and processes, knowledge about the local best practices and contents, and delivery of government services at their doorstep. This paper gives an overview of e-DISHA ESK initiative.*

**Keywords:** e-DISHA : Electronic Delivery of Integrated Services, Data Centre, HarSWAN: Wide Area Network, Common Services Centers

### **1. Introduction**

The Government of Haryana has given a special emphasis on implementing Mission Mode e-Governance Projects, identified under the National e-Governance Plan (NeGP). A communication corridor i.e. Haryana State Wide Area Network (HarSWAN known as ADHAAR) has been established to connect State Head Quarter Chandigarh with District Head Quarters and to further link Blocks/Sub-Divisions/Tehsils/Sub-Tehsils on a three level vertical structure. The Haryana SWAN was inaugurated on Feb. 06, 2008.

The State is implementing, CSC (Common Service Center) Scheme for establishing and operating 1159 rural CSCs and 104 urban CSCs (including 49 Showcase CSCs) under the state's brand name "e-DISHA Ekal Seva Kendras" for the dissemination of various services to the citizens i.e. G2C, B2C under one roof, under GOI scheme of establishing one lakh CSCs across the country. The rollout of CSCs in Haryana in rural areas have been achieved 100% while in urban/showcase CSCs it is more than 67%.

The NIC State Data Centre at Haryana has been established in Civil Secretariat with 8 TB storage capacities. To Integrate the SWAN and CSCs infrastructure and to have a common central repository of all applications and data, establishment of a large scale Haryana State Data Centre has also been approved by DIT, Govt of India under NeGP scheme with NIC as the implementation option of the SDC scheme. The core ICT infrastructure (namely SWAN, HSDC, CSCs) in Haryana is going to be in place in an integrated way. The e-DISHA Ekal Seva Kendra (CSCs) has been established across the state on a PPP model through SCAs (Service Center Agencies). The G2C services have started at CSCs of Guragon & Rohtak blocks. The SCAs are required to provide all computing and Networking infrastructure and recurring expenditure. The issues of project architecture, security infrastructure, government process re-engineering, service level

<sup>1</sup> Government of Haryana, 4th floor, Haryana Civil Secretariat, Chandigarh – 160001, India

<sup>2</sup> NIC-Haryana SC, 9th floor, Haryana Civil Secretariat, Chandigarh – 160001, India

*Corresponding Author:* (Email: sio@hry.nc.in, Telephone: +91-1722711642, 9417984502)

agreements, audit, publicity, etc. are to be addressed jointly with SCAs, DEIT, NIC-HRSC, Hartron (state government Public Sector Undertaking) and line departments. The issues of connectivity are being dealt with keeping in mind the present status and the future scenario with SWAN already in place.

Backend operations and integration of departmental applications with databases are to be handled by the IT Department in technical consultation with NIC– HRSC. Hartron would provide the project management arm to the State Government, whereas, the technical aspects of e-DISHA Application software are being supervised by NIC Haryana State Centre. The front end operations of running the e-DISHA Portal would be handled by the SCAs. The project “e-DISHA Ekal Seva Kendra (Common Service Centers)” is an effort towards creating a Citizen Services Network, a way to take the governance to the citizens at their doorstep and hence make it available even at the grass-root level. The key objectives are to improve the quality of life of the people, upgrading the standard of administration, especially in social and public services, and to provide public centered efficient and cost effective governance. The project is seen as a trendsetter in the State and will ensure delivery of services with efficiency, effectiveness and transparency.

## **2. Broad Objectives**

- To make governance transparent, thereby maximizing citizen interaction with government,
- Improve relationships with citizens by enabling online transactions, and feedback to administration and legislation,
- Reduce the costs of service delivery through reduced duplication of efforts by individuals and departments.
- Improve the quality of delivery of public services; take local knowledge to the world,
- Set-up information kiosks owned and run by local entrepreneurs financially sustainable,
- Extensive percolation of functional as well as IT Literacy,
- Provide effective, efficient, timely, transparent, hassle free services to the citizens at their doorsteps,
- Eliminate corruption and middlemen from the process,
- Create knowledge based jobs in the district and extend benefits of ICT to the masses.

## **3. Efforts on Citizen Services Delivery**

Haryana government has established the DLeDCs (District level e-DISHA Centers) in all district mini secretariats in Haryana. These DLeDCs are providing the services, which are strictly in government domain. These services include issue of various certificates, driving license, vehicle registration, birth and death certificates, passport, and services related to arms licenses etc. The time bound service delivery has resulted in improving the efficiency of delivery of the services and elimination of corruption and middlemen from the process. By providing a wide spectrum of services at a single place has helped in saving citizens from the trouble of running around various departments. These centers are also expected to help in integration of databases of Government departments and organizations. This integration can also force the user departments to carry out process reengineering and standardization in delivery of services. Besides, these centers are creating jobs in the districts for the local IT savvy youths and spreading the utility of Information Technology among the masses. This has also helped in improving the financial health of District Red Cross / IT Societies. The project has been found as one of the best self-sustainable model.

## **4. Integration of DleDCs and CSCs**

With the roll out of e-DISHA Ekal Seva Kendras (CSCs) across the state, the need has been felt to integrate CSCs with DleDCs project in Haryana.

### **4.1 Suggested Strategy**

The suggested strategy is described for various services in following section

*Focus of Initial Phase - I*

- Inclusion of CSCs as a formal channel of G2C Service delivery
- Replication of existing G2C service delivery processes and extending the reach of services through CSCs.
- Standardization of forms for G2C services to be rolled out through CSCs. The forms to be made available in English and Hindi. The CSC operators shall have proficiency in computer word processing in Hindi as well as English.
- Downloadable forms/XML based forms (Creation of XML based forms with e-Disha logo, over it) would be made available at CSCs. The VLE (Village Level Entrepreneur - CSC operator) would feed in the applicant information into the XML based forms along with capturing of applicant's photograph and signatures. Printout of the form along with requisite enclosures would be sent to corresponding Tehsil/DLeDC for backend processing along with the soft copy of applicant information.

*Data Synchronization (between CSC & DLeDC) Interface*

- SCAs (Service Centre Agency) under the guidance of NIC team would create the XML based forms to be used for G2C service delivery
- The data collected from the CSCs would be synchronized at DLeDC in online/offline mode using file transmission of relevant records CSC wise/Date wise(Unique id).
- SCAs under the guidance of NIC team would develop a porting module for data synchronization between a) CSC and DLeDC/Tehsils, b) Tehsils/SDM offices and DLeDCs
- Data would be transferred to DLeDCs using SWAN network wherever possible.
- The module would enable MIS reports at all levels- CSC wise, date wise, transaction wise etc

*Improvement in backend processes of DLeDC*

- Defining standard workflow sheet to track the service flow from input to final delivery
- It was agreed that the backend processes at existing DLeDCs should be streamlined and standardized at all the districts to bring about uniformity, so that the additional administrative layers in service delivery may be removed. The service delivery process would include only the Citizen, Verifying Official and signing authority as the case may be for each service.
- Standardized Checklists to be introduced for ensuring compliance to standard forms and enclosures required for each service
- CSC - Cash Receipt and File Receipt/Dispatch counter would be created at the backend of every Tehsil/DLeDC office by SCA and district administration, to accept and verify the cash receipts and to act as focal point for accepting files and documents from the CSCs and dispatching the final output delivery to CSCs

*Capacity Building*

- Training of SCA staff for G2C service processes would be facilitated by district administration/concerned department.
- The SCA staff would further train their VLEs (Village Level Entrepreneur) for delivering / facilitating G2C service delivery
- A citizen charter defining the charges and period in which an application submitted at CSC level (for each G2C service) shall be processed to be displayed at each CSC.

*Service Delivery*

- The SCA would be required to deploy additional staff/work out arrangements, for movement of cash and documents. It is to be ensured that VLE is not entrusted in any logistics activity, as that

will immediately hamper the centre operations.

- The distribution of final output might be taken up by the VLE himself from the CSC, to increase the credibility of the CSC at the local level.

*Phase-II Integration focuses on:*

- Government Process Reengineering (GPR) and technology intervention for simplifying the processes and service delivery

#### **4.2 Benefits of Proposed integration**

- Improvement in services with focus on customer relationship management by SCAs
- Service delivery for rural citizens at their doorsteps.
- Reduction in costs involved from the citizen end in accessing government services.
- Reduction in number of citizens visiting DLeDC thus leading to reduced work pressure for the DLeDC staff.
- Data in digital format for cost effective storage and easy retrieval
- Analysis of digital records is possible leading to stronger MIS.

#### **4.3 Services Proposed to be integrated through CSCs**

Initially following G2C services are being initiated through integration of DLeDCs & CSCs

*Certificates Services*

- Issuance of Caste Certificate (SC, BC, OBC)
- Issuance of Domicile Certificate
- Issuance of Birth certificate
- Issuance of Death certificate
- Issuance of Income certificate
- Issuance of Physically Handicapped Certificate

*Passport application Forms filling & Acceptance*

*Driving License Services*

- Permanent Driving License
- Learners License
- License Renewal
- Duplicate License
- Addition of other class of vehicle in existing License
- Medical fitness certificate

*Vehicle Registration*

- New Vehicle Registration
- Re- registration of Vehicle
- Duplicate copy of Registration Certificate
- Issue of No Objection Certificate (NOC)
- Registration for Police passing

*Online Grievances Redressal Services*

*Right To Information (RTI) application Services*

- Receipt of Applications for Social Welfare Schemes:

- Old Age Pension
- Widow Pension
- Handicapped Pension
- Financial Aid to Destitute Children
- Scholarship for Handicap Children
- Family Benefit Scheme
- Kanyadan Scheme
- Widow Daughter Marriage
- Indira Awas Yojna
- Below Poverty Line
- Downloadable Forms & Procedures
- Official E-mail & Internet Services
- Technical Education School Board Services
- Property Registration Related Services
- Land Records copy of Record-Of-Right & Mutation Services

## **5. Government Process Re-engineering Requirements**

### **5.1 Affidavits**

- The requirement for filing of affidavit can be replaced with provision for verification from Patwari and (or) Sarpanch/ Numberdar/MC, for identity and proof of residence. In order to simplify the processes of governance for citizens, verification using available database like Birth & Death, SJE Pensions and Election Voter ID Card & BPL Census survey and / or Driving License, Income Tax PAN Card, Election Voter ID Card, Passport, Ration Card etc. is suggested.
- To compensate for revenues on stamp paper sales, CSC can be authorized to collect additional fee in respect of value of stamp paper from the applicant. VLE/SCA shall arrange to deposit such fees in Govt. Head/Account. The SCA can be made licensed vendor for issuing stamp papers through CSCs.
- e-Stamping technology with date and time stamping can be adopted in place of physical affidavit / stamp paper. Online verification and tracking is possible.

### **5.2 Medical Certificate for issuance of driving license**

- Medical Officer of nearby Government Health Centre / Hospital can be authorized for issuance of Medical Fitness wherever required as part of service delivery process. The medical forms in such cases have to be standardized one.
- The medical officer has to issue certificate only on the standardized format with a logo of the e-DISHA Ekal Seva Kendra for promoting the CSC brand at village level and immediate acceptance at the PHCs.
- A circular can be issued to ensure that the Medical Officer/ Government Doctor at the Sub-Division/ Tehsil/ Village level will be available at a designated period in a week for completion of medical examination for the purpose of driving license. CSCs would inform the schedule of Medical Officer's (Government Doctor) Visit to the Primary HealthCare Center (PHC).

### **5.3 Passing of Driving Test /Vehicle**

- Authorized /Licensed Driving school can issue the Driving test certificate to learner license holder for processing the issuance of Permanent Driving License. OR the SHO/Sub Inspector of nearby Police station can be authorized to take such driving test and verification and passing of Vehicle for Registration.

- A provision can be made at CSC for conducting the online driving test before applying for permanent License.

#### **5.4 Digitization of Records**

- The digitization of government documents with options for online authentication, access, search and retrieval using a Document and workflow Management System (DMS) can be taken up as a separate project (presently the documents submitted by the citizen at DLeDC are not archived as scanned documents in a database), for enablement of G2C services.

### **6. ICT Infrastructure Requirements on Government Side**

- District Level e-DISHA Centre: District G2C applications are hosted at DLeDC. G2C data is processed at DLeDC for delivery of various G2C services. Data from all CSCs in a district is to be submitted to DLeDC by SCA. This Data is to be aggregated at SCA data centre. DLeDCs are operational at 20 district Head Quarters.
- State Data Centre: State data centre will host all statewide applications and databases. It will also host departmental applications and data. State data centre will also host state portal. A State Data Centre would manage data of the various departments at a single point or connect to the heterogeneous back-end system of the various Departments and provide connectivity to the SCA over the Web or through a secured connectivity. The SCA would then connect only to a single point for G2C interactions. State Data Centre is to be established as per the guidelines of DIT Government of India. Currently NIC-Haryana State Data Centre is operational at Civil Secretariat 24X7 with 8TB existing storage capacity.
- State Portal: State portal will present unified image of state. It will provide static information about the state. It will also provide single online interface for all state e-governance applications and services. On the back end state portal will provide threads (links) to all DLeDCs in the state. The state portal will be hosted at State data centre. Development of state portal is planned along with the establishment of State Data centre. The existing state portal at [www.haryana.gov.in](http://www.haryana.gov.in) is being maintained by NIC-Haryana Centre in association with Departments of IT & Public Relations.
- SDA: State Designated Agency (Hartron) will work out standard timeline based workflow for delivery of each G2C service in consultation with NIC and service providing authority. This workflow shall be strictly followed by all the stakeholders in general and SCA in particular.
- NIC: NIC Haryana has developed the G2C service applications for DLeDCs. These applications have been optimized to meet business requirements. Many of these applications are Web enabled. These applications are being used at DLeDCs for delivery of G2C services. These application needs to be integrated district wise with the state portal.
- SWAN: State Wide Area Network shall provide physical connectivity to all stake holders in government domain for delivery of G2C services. SWAN has is being implemented up to block HQ.
- LAN: Local Area Network at District mini secretariat, State Secretariat and Department HQs and field offices will connect all stakeholders involved in delivery and monitoring of G2C services. LANs have been established at State Secretariats and District Mini secretariats.

### **7. Infrastructure on SCA Side**

- SCA Data Centre: SCA data centre would act as service aggregator for all CSC service requests for (G2C) or (B2C) services. For G2C services the SCA would establish connectivity to the State Data Centre using SWAN or other modes of connectivity and route the B2C requests through intranet / internet to the other content providers. The SCA would act as service aggregator and routing point. The service would get registered with the SCA for control purposes. The SCA may

also host content on its Data Centre and requests for such content would be routed to the relevant servers. In summary, the SCA and the CSC would be connected as an intranet. The SCA would connect State portal through Internet or the SWAN. Under this option, the SCA would need to establish proper firewalls as an Information Systems security measure.

- SCA Portal: SCA portal will provide single point of contact for all G2C and B2C services to all CSCs within the control of the SCA. On the backend SCA portal will connect to various applications required for monitoring, reporting for G2C services and contents providers or B2C services.
- e-DISHA Ekal Seva Kendra (CSC): The CSCs are front end delivery channel for offering G2C and B2C services. Each CSC is being managed by a VLE. CSC will access SCA portal for delivering various services. For this CSC will connect to SCA data centre through Internet or dedicated link. This link should be supplemented by another link to maintain high uptime and reliable connectivity during peak requirement.
- Connectivity between SCA Data Centre and e-DISHA Ekal Seva Kendra (CSC): Connectivity is an essential component and will have to be carefully designed and selected to ensure reliable link during peak hours. For each CSC more than one of following connectivity options have to be planned:
  - Dial-up - Wired or wireless PSTN/ ISDN/ GSM or CDMA or WLL mobile
  - Fiber to home
  - Leased line through copper or fiber
  - corDECT, digital radio
  - Wi-Fi (802.11b) / Wi-Max (802.16a), Wired / wireless Ethernet
  - Coaxial Cable
  - Satellite networks – VSAT
  - Broadband Internet etc.

## **8. Integration and Connectivity**

- For delivery of various services (both G2C and B2C) each CSC will connect to service portal of respective SCA using various connectivity options. In case of G2C services SCA portal will connect to respective DLeDC through state portal through dedicated connectivity to SWAN or Internet.
- SCA and SDA will implement necessary work flow as required by each G2C application and service providing authority.
- CSC operator will carry out necessary transaction as required by the G2C service application and issue the receipt. CSC operator will also collect statutory fee and hardcopy of necessary documents. Hardcopy of required documents will hand delivered by the SCA to concerned DLeDC for backend processing.
- SCA will generate various reports/ statements of accounts required by the service providing authority and DLeDC. Concerned authority and DLeDC shall verify these reports/ statements of accounts and carry out backend processing for delivery of requested G2C service through SCA and CSC operator.
- The Proposed connectivity plan is placed at Figure 1.

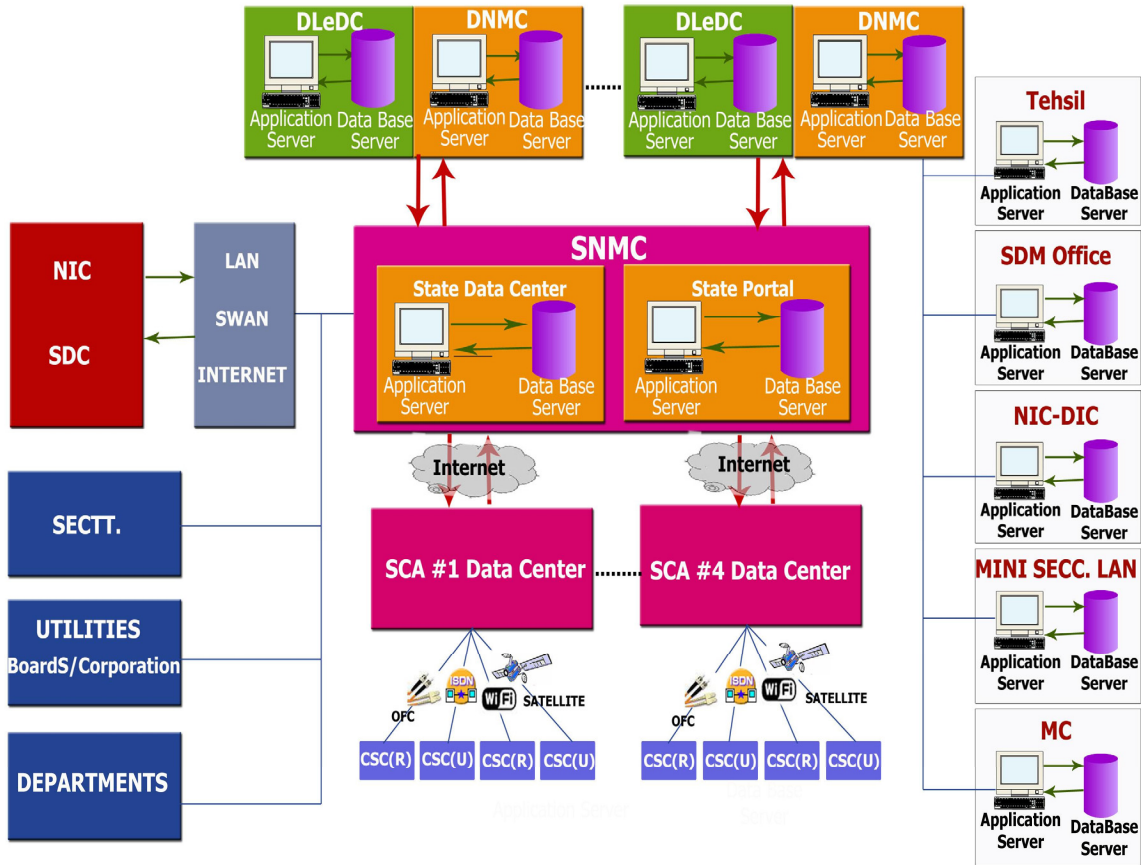


Figure 1: Proposed Connectivity Framework for DLeDCs, CSC, SWAN, SDC, DNMCs

### 9. Concluding Remarks

Beginning has been made, now it is the time to scale up the initiatives already taken to the web technologies, with payment gateways interface. It is intended to offer transactional services where the common man is interacting with the Government through a unified, integrated web enabled system. The project would be a trendsetter in the State and will ensure delivery of services with efficiency, effectiveness and transparency. The management of such a project would definitely be a stupendous task and would involve coordination of all the stakeholders. The synergy and convergence of efforts of all the parties would be necessary for smooth working of the Citizen Services Centers. The views and approaches discussed in the papers are mentioned just in the personal capacity by the authors and should not be treated as any official views.

*Acknowledgements:* We are thankful to Sh. Jainder Singh, IAS, Secretary DIT, Govt of India, Shri R. Chandrashekhar, IAS, Spl. Secretary DIT, GOI and Dr. B.K. Gairola, DG(NIC) for their continuing support. The support being provided by the officers of Haryana IT Department, Hartron and NIC Haryana scientists is also acknowledged.



***About the Authors***

*Dharamvir* is an officer of Indian Administrative Service, Haryana Cadre, 1973 batch. He has worked as Principal Secretary to Government of Haryana, Department of Information Technology, Technical Education, PWD (B&R), PWD (PH), Revenue & Disaster Management, Home & Administration of Justice to name a few. Currently he is holding the position of Chief Secretary to Government of Haryana. He has obtained a Master's Degree from IIT Kanpur.

*Ghan Shyam Bansal* is working as State Informatics Officer, NIC Haryana State Centre. He has 28 years of experience in the conceptualization, planning, development, deployment and implementation of various key initiatives in Haryana in the field of ICT & e-Governance. He received a M.Sc. degree in M. Statistics with specialization in O.R. and a Post M.Sc. diploma in Computer Science from K.U. Kurukshetra. He has received a dozen national e-Governance awards and published many technical papers & case studies on e-Governance projects of Haryana State in national and international conferences. He has a deep understanding of the issues and problems related to ICT implementation in State Government and experience in finding innovative solutions to such problems in field conditions.