

Chapter 22

eTransport in Kerala

VP Joy & M Asir Edwin

I) OVERVIEW

Computerization of RTO/SRTOs was started in RTO, Thiruvananthapuram on 2002 by customizing **Vahan-Sarathi** (SMART-Move) developed by NIC. Government has decided to replicate the software in all other RTOs and SRTOs as a BOMT model and ECIL has entrusted for the implementation and replication of software. After the computerization of all the offices, department decided to enable G2C,G2E,G2G and G2B services to the public, employees, other government and business agencies. For this purpose a new project for e-services called **SMART e-Transport** is decided to implement with the help of NIC. The SMART e-Transport project for various services from the central database are developed in LAPP (Linux-Apache-PGSQL-PHP) platform and proven web technologies. The SMART e-Transport is built above the legacy application SMART Move and both these application are functioning as compliment to each other.

The major challenge for implementing SMART e-Transport was the building of a Central Data Base for department using the digitalized data capturing at RTO/SRTO level and connectivity of offices to the State Data Centre. For building the central database by data consolidation and synchronization from RTO databases in SQL Server to Central database in PGSQL NIC has developed a replication technology called is **SMART-Sync**. The KSWAN (Kerala State Wide Area Network) connectivity between the offices and the State Data Center has been established in 57/60 offices for enabling the e-Services effectively to the public. The SMART-Sync technology was extended to provide the data required by Government of India for building the National Register (NR) of Motor vehicle and driving license holders.

The Motor Vehicles Department's central database contains, details of around 66 Lakhs vehicles and around 1.2 Crore driving licenses. From this central database, various G2C, G2G, G2B and G2E services are planned to initiate through the department portal. For this purpose a web site for the department is developed (<http://keralamvd.gov.in>) using Joomla – open source content management tool and various e-Services and m-Services has been enabled through this portal. Many facilities like submitting e-Application for various

departmental services and information related to vehicles, driving license, file status etc. has been enabled through the portal. Also application called **SMART-DataXchange** is developed by NIC for data exchange between Offices of KMVD, transferring E-Application details to the respective RTO/SRTO, data exchange between department and Government Citizen Service Centers (CSC).

By the implementation of this project, the public is provided with various service access points like SMS (mobile telephone), touch screen kiosks, Internet, Akshaya, FRIENDS etc. So they need not go personally to the departments concerned to know the details on application status or for other department related information. They can also submit application for availing the services from the department through e-Application facility provided in the department web portal. Thus they can save the cost and time, which will be otherwise spent for the agents. This system ensures more efficient and satisfactory service to the public by avoiding unnecessary procedures and undue delay in processing applications. As a G2B/G2E model, authorized user-Id and password is provided to the vehicle dealers to submit vehicle sale details through the portal. This will help the employees in the vehicle registration process and ensures the accuracy of data and speedy generation of Registration Certificates.

Also, as part of 'm-Governance' initiatives of Government of Kerala, Motor Vehicles Department has taken another step forward to make available the departmental information through SMS. For this purpose, an application called **SMART m-Transport** implemented recently by the department with the help of KSITM and NIC. E-payment facility will be started soon on getting sanction from the Government and this is under processing.

II) RESULT INDICATORS

1. Key Performance

a. Stakeholder services and benefits achieved through ICT interventions

Major stakeholders of the projects are

- Citizen
- Dealers, Driving Schools , Insurance Companies, Financial companies etc
- Employees of the Motor Vehicles Department
- Law Enforcement Departments like Police, Excise, Customs etc
- Government Service Delivery Centre like FRIENDS, Akshaya Centers

- Non-Governmental Agencies conducting surveys for vehicle manufacturing companies and agencies working on Road Safety measures

Government to Citizen: - The G2C services with advanced features are available through the official website, KIOSK provided in all the offices and through mobile phones. Citizen can also submit e-Application for 24 services of the department through the portal for getting various services from the department. This important initiative for Electronic Service Delivery will provide significant benefits to the citizens.

The following e-Services are enabled for the citizen through this project.

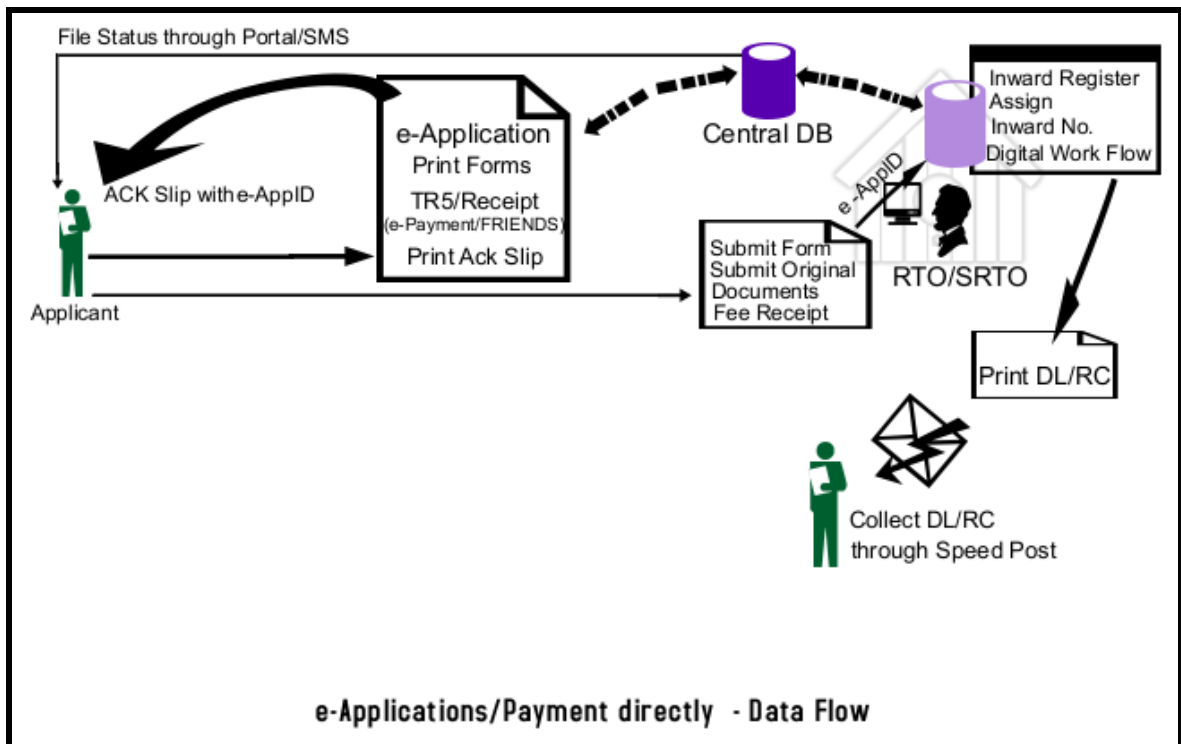
- E-Application for DL related services like New Learners License (LL) and Driving License (DL), Booking date for LL test, Renewal of DL, Duplicate DL, Change of address in DL, Change of DL from other state, Endorsement of additional driving vehicle classes, Badge for driving transport vehicle, DL Particulars etc.
- E-Application for the vehicle registration related services like Transfer of vehicle ownership, Re-assignment of Vehicle registered in other state (RMA), Duplicate RC, Renewal of RC, Endorsement of Hypothecation, Hypothecation Termination, NOC, Vehicle Fitness certificate and booking date for fitness test etc
- E-Application for various services of All India Tourist Taxi Permit
- Citizen can book their Learner's License Test and vehicle fitness test date
- Assured electronic delivery of the request from the citizen to the office of the department
- The electronic acknowledgement of successful submission of application/request from department to the citizen
- Citizen will be able to query the status of his/her application/request at any point in time will be conveyed through the site or mobile. Information Services for Vehicle details, DL details, RTO/STA File Status, Number Allotment Status, Number Booking Status, Number Booking History, Temporary Registration Status, Tax Calculator etc.
- Complaint redressal system and Learners License Mock Test

Department introduced a new system called "FAST Track Counters" in its offices across the state for providing fast and better services to the public. Through the new system 15 services will be delivered within 30 minutes after the receipt of application. E-Applications received through the web portal helped a lot in the implementation of this Government policy.

Citizen can file grievances to respective RTO/SRTO, Zonal Office or Transport Commissioner Office of the department through the internet. An instant automatic email reply will be given as acknowledgement. The citizen can book date for appointment for submitting grievances directly to the authorities. Transport Commissioner's office and Zonal Offices will monitor the complaints and redressal of complaints by the respective RTO/SRTO.

Before the introduction of e-Applications, the citizens were forced to take services of agents sitting near the RTOs and SRTOs to get the prescribed application forms and for filling the application. For this the agents will charge an amount to the citizens and entries making in the application were wrong and illegible to read. After the introduction of the new system, citizens need not fill majority of the columns in the application as the data corresponding to the relevant columns are fetching directly from the central data base. This ensures accuracy of data and help in the speedy processing of the services. The citizen can print the application forms with relevant data from the portal will avoid the ambiguity in filling the application form.

The e-Applications received through the portal is pulling to the respective offices by the web service in the central server to complete the service. The data flow diagram for the e-Application process is given below.

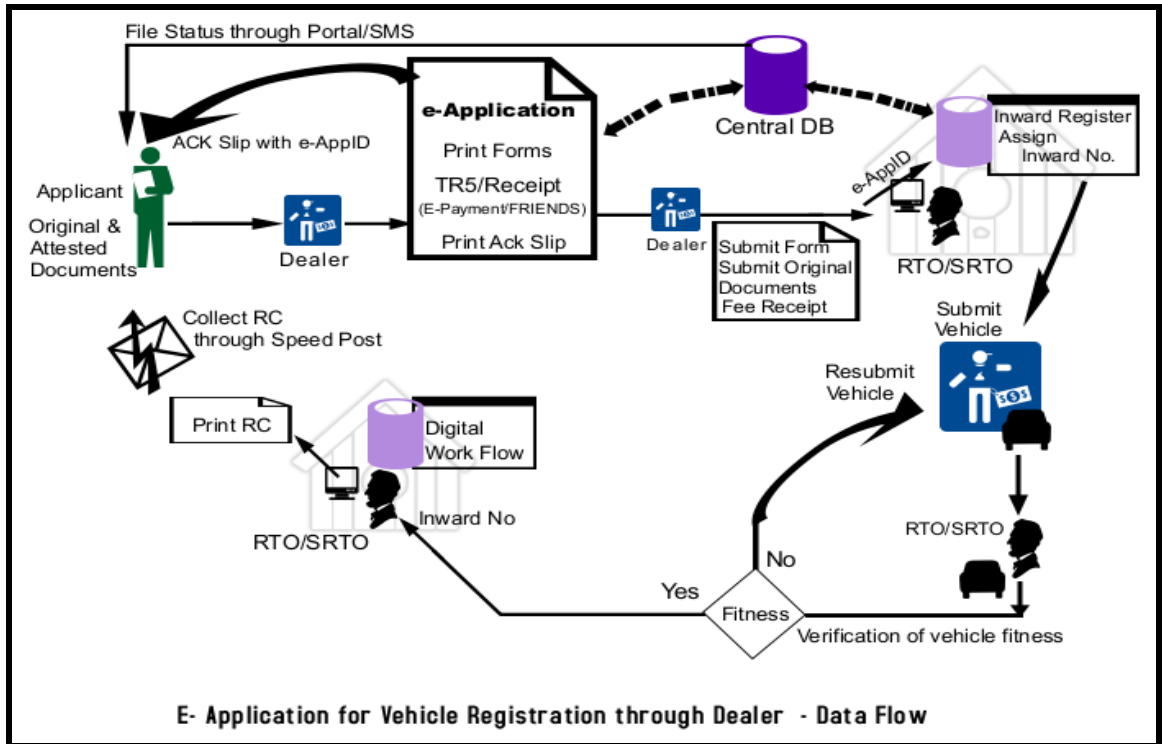


SMS based services introduced by the department also help the citizens to get services through mobile phone. The information on Vehicle details, Application status, STA permit application status, permit application status, allotted registration number of vehicles, vehicle tax, vehicle number booking range, vehicle number availability are available through SMS service by sending SMS to the number 537252. The formats for sending SMS are available in the MVD portal or send SMS as MVD HELP 537252.

Government to Business

G2B service enabled through vehicle dealers for new vehicle registrations in the state. The vehicle dealers in Kerala are uploading the vehicle details through the web site of the MVD portal. E-Applications for registering new vehicle through internet has received very good public opinion as this has reduced the vehicle registration time from 10 days to 3 days !! More than 4 Lakhs e-Application received and processed by this time. Time taken for the dealer in RTO counter for submitting Form21 (Application form for vehicle registration) has come down drastically as the data entered by the dealer in the portal is replicated to the respective RTO/SRTO within 10 minutes (configurable) using web services. Form21 can be printed from the MVD site with all data and no need to fill the form manually. Previously entered Form 21 details are available in the portal for future reference by the dealer.

The Data Flow Diagram for the vehicle registration through dealers is given below.



Driving schools are another stakeholder of the SMART e-Transport. They are using the e-Application facility for booking date for learner’s license test. Pre-booking of test date and time helps the citizen to avoid the long queue in the offices.

Banks and financial companies can verify the already availed vehicle loans to the vehicles. This prevents the misuse of taking loans with same vehicle from different financial institutions and banks.

Another G2B model is through CSC’s like AKSHAYA Centers. Citizen can also remit tax, fees, cess, etc. and file e-Applications through Akshaya Centers, an innovative project implemented in the State of Kerala aimed at to deliver services to citizen. For filing e-Application citizen can avail the help of Akshaya consultants after paying the Government prescribed CSC fee. This will be an earning for the people running Akshaya centers. Integration and data exchange between these Akshaya centers and the KMVD is also implemented through the Kerala State Data Center. The remittances will be daily updated to the department’s central database and from there replicating back to the respective RTO/SRTO.

Government to Employee

G2E benefits in terms of reduced back end procedures, abolishing of time consuming manual processes, ease of working, better ambiance, anytime,

anywhere access of files, easy search and retrieval are some of the direct benefits which accrue to employees. E-Application procedure and acceptance helped the employees by reducing the back end procedures, to ensure the accuracy of data and speedy generation of Registration Certificates, Driving Licenses and other documents issued from the department. This system ensures more efficient and satisfactory service to the public by avoiding unnecessary procedures and undue delay in processing applications.

- In the organization perspective, improved productivity and efficiency, reduced costs are direct benefits. The ability to handle growth in activities is consequence of the increased productivity of employees. The following are some of the facilities enabled for the MVD officials.
- Data Exchange between offices from the central database through web service technology helped the employees in avoiding repeated backlog data entry and eliminates chances of mistakes and malpractices. Before the new system, if a vehicle or driving license is coming for owner change or address change, data related to that was to be entered in that office. Now it is possible to pull the data from the central data base, if it is digitalized from any one RTO/SRTO.
- Verify the genuineness of temporary registration certificate by actual registration authority before the vehicle registration process.
- Daily reports on Tax collection, Fee, Compounding Fee and User Fee collection and CESS collection.
- Periodical statements to the Head office and Government are easily available
- CALLS test statistical report
- Online Accident and Incident reporting service
- Complaint monitoring and Actions
- SMS based services strengthen the enforcement of MVD Act & Rule by the vehicle inspectors

Government to Government

The department has also giving G2G services for various departments like Police, Excise and Sales Tax etc. by sharing information like Driving license, Vehicle Details and Vehicle Permit Details through the website using the authorized login providing by MVD. The following are some of the facilities provided to other Government departments.

- Exchange of data between other departments & e-governance applications of State government like FREES

- Details of driving license including photo, by giving the driving license number and date of birth of the license holder for verification by the enforcement team using authenticated login id
- Full details of a vehicle registered in the state by giving the registration number of that vehicle for verification by the enforcement team using authenticated login id

The National Register for Vehicle and Driving Licenses has been made for the interconnectivity and data exchange between other states also. The National Register will be very helpful for the processing of National Permit System introducing by the Central Ministry of Road Transport and Highways.

The Kerala State IT Mission (KSITM) under the Department of Information Technology, Government of Kerala has constituted "Friends Janasevana Kendras" in all the District Head Quarters in the state, as Common Service Centers (CSC). Motor Vehicles Department is one of the participating Departments in this CSC and citizens have the facilities to remit tax, fees, cess, etc. in this CSC. Integration and data exchange between the CSC and the KMVD is also implemented through the Kerala State Data Center. The remittances will be daily updated to the department's central database and from there replicating back to the respective RTO/SRTO.

The SMS facility also empower the enforcement officers of Police / MVD/ Excise departments who are on field duty, with all the necessary and correct information about the offenders.

b. % of services covered as ICT interventions

This department deals with a variety of services which can be broadly categorized as,

- Registration of Vehicles and a huge number of related services
- Issuance of Driving License and related services
- Issuance of Conductor License and related services
- Issuance of permits to Transport Vehicles and related services
- Collection of Tax, Road Safety CESS, Fees, Compounding Fee and its accounting
- Issuance of Driving School License and related Services
- Issuance of Trade Certificate to Vehicle Dealers and related services
- Stock Management
- Enforcement of Laws related to Motor Vehicles
- Enforcement services at check-posts

- Enforcement services at O/o State Transport Authority
- Enforcement services at RTO National Sector

At present 100% of the departmental services are enabled through the computerized RTOs, SRTOs and Check Posts of the department using SMART Move. By the implementation of SMART e-Transport, 80% of the services are now providing to the public through e-Applications received through the MVD portal. More than 6 Lakhs application were received and processed by the department. The introduction of e-Application already received a good public acceptance as it help the speedy processing of the departmental services.

c. Geographical Spread in the State achieved

- E-Services through Internet, Kiosk, SMS and CSC's
- 100% coverage through out state
- Other state can use the departmental data for verification and genuineness of the RC, permit and driving license
- Public can access the system through internet and SMS right at their home or from any where in the world. So the geographical spread is all over the world
- Vehicle dealers all over Kerala can submit application for new vehicle registration, driving schools can submit application for learner's license & driving license for their candidates, banks and other financial institutions can verify the hypothecation endorsed for the vehicles.

2. Efficiency improvement

a. Time saving / improvements in the delivering the above set of services.

- In the conventional system, the citizens were forced to take services of agents sitting near the RTOs and SRTOs for purchase the application, filling the application, submitting the application, follow up of submitted application and its present status and finally for getting the documents like RC book, driving license etc etc.
- After the introduction of SMRT eServices, the application form filling has become citizen friendly. Citizens need not fill majority of the columns in the application, as the data corresponding to the relevant columns are fetching directly from the central data base. There is no more application filling phobia for the citizen.
- The electronic data captured through the SMART e-Transport results in data quality improvement and improved speedy processing of the services in the offices of the department.

- In the previous system, employees need to do the data entry of many details for new vehicle registration and new driving license. Now through the online application, they could capture majority of the data which helped in the speedy process of the services.
- As the appointment date can pre-book through the SMART e-Transport, the citizen can directly go the RTO office and take service on the availed date by submitting the e-Application form printed from portal without taking the help of an outside agent. This avoids the long waiting in the normal queue in the offices.
- The conventional system is re-engineered for SMART e-Transport the citizen needs to go to the respective RTO/SRTO only once for submitting the application. All other movement of the application status are providing through internet and SMS. Finally the document (RC book, DL, Permit etc) will be sent to their home through speed post.
- Acceptance of e-Application has reduced the time-taken in application processing in the offices by avoiding repeated backlog data entry and eliminates chances of mistakes and malpractices
- The e-Application processing helps the employees to regain the image of the department and reduce the per-capita workload of the staff to some extent and there by reduce the stress and strain of each employee.
- Complaints against the department is minimized, presence of agents are minimized.
- Retrieval and access of data have become more easier as every data is available in the central data base

b. Cost savings for delivering above set of services.

- Number of vehicles, number of driving licenses, and amount of Revenue collection are increased by 190%, 160%, 182% respectively during the last decade, while the increase in the number of staff is merely 17%. Computerization and e-Application processing helped employees to handle larger number of services for the citizen. Thus the Government could save expense on appointing additional staff or running additional offices based on the huge growth in the increase in the number of services.
- SMRT eServices is developed in Open source platforms Linux, Apache, Postgresql, PHP which helped to save a large amount comparing to the proprietary software

- Home page of SMART e-Transport is also developed in Joomla open source content management framework
- Software design, development, consultancy and management are provided free of cost by National Informatics Centre
- Common infrastructure like KSWAN, SMS gateway and State Data Centre of the Government are used which resulted in reduction of project cost.

c. Time Saving for availing the services (reduction in cycle time)

SMART e-Transport will be available 24 hours a day, 7 days a week, and accessible from anywhere in the world via the internet and SMS service and enabling tracking of the status of the application through internet or mobile by giving the unique e-application ID.

Services	Before the introduction of e-Application	After the introduction of e-Application)
New Vehicle Registration	> 10 days	2 - 4 days
Issue of Duplicate RC	> 7 days	Same Day
Change of Address In RC	> 7 days	Same Day
Re-Registration of Vehicle	> 15 days	2 - 4 days
Transfer of Vehicle Ownership	> 7 days	Same Day
Hypothecation Endorsement in RC	> 5 days	Same Day
Hypothecation Cancellation in RC	> 7 days	1 - 2 days
Issue of No Objection Certificate	> 5 days	1 - 2 days
RC- Particulars	> 5 days	Same Day
Renewal Of Vehicle Registration Validity	> 7 days	1 - 2 days
Fresh AITT Permit	> 10 days	2 - 4 days
Renewal of AITT Permit	> 7 days	2 - 4 days
Transfer of AITT Permit	> 7 days	1 -2 days
Cancellation of AITT Permit	> 7 days	1 - 2 days
Re-Issue of AITT Authorization	> 10 days	1-2 days
Issue of Driving License	> 10 days	2 - 4 days
DL- Particulars	> 5 days	Same Day
Issue of Duplicate Driving License	> 5 days	Same Day
Renewal of Driving License	> 5 days	Same Day
Change if Address in Driving License	> 5 days	Same Day
Transfer of other state Driving	> 7 days	1 - 2 days

License		
Additional endorsement vehicle class in License	> 7 days	2 - 4 days
Issue of Driver's Badge	> 7 days	2 - 4 days

d. Cost Saving for availing these services

- Before the introduction of e-Applications, the citizens were forced to take services of agents sitting near the RTOs and SRTOs to get the prescribed applications and for filling the application. For this the agents will charge an amount to the citizens to fill the application. Now using SMART e-Transport, citizen can directly use the online application and can save the amount to be given to the RTO agents.
- Before this, the citizens were forced to take the service of an RTO agent or to travel to the respective office (3- 4 times) by taking leave from office/ job place

e. Cost savings for the citizen for availing the services

Approximate cost savings on avoiding agent or multiple visit to RTOs = Rs. 500/-

Cost savings for average 1,000 applicants daily through out the sate on avoiding agent multiple visit to RTOs = Rs. 5,00,000/-

Cost savings on an year (Average 300 working days) = Rs. 15,00,00,000/-

Approximately, the savings for the citizens is Rs. 15 crore

III) ENABLER INDICATORS

1. Processes

a. Major front end process changes and implemented

Service requests submitting by the citizens against the service levels which shall involve the following steps:

- Taking the printout of the e-Application form
- Push the application to the concerned offices through web service and process it in the offices through the customized Vahan-Sarathi application.
- Updating the status of application and process stages on the department portal from time to time

- Sent the registration certificate/license/permit etc to the applicant through speed post.
- Enabling tracking of the status of the application through the unique e-application ID

b. Major back end process changes and implemented

The e-Application is the major change management and in the first phase, it was a difficult task to the implementation team to educate the vehicle dealers, driving school people and citizen with the new concept. By training, workshop and support from department staff and top managements, the stakeholders were made to appreciate the new change.

Once the submission of e-Application is done to the department Portal, the data will be routed to the respective offices through web services. Citizen will get periodic status update and other information on the Portal.

The back end process for data synchronization between RTO and central services could handle with the custom developed synchronization tool. It is the one of the department, using the KSWAN connectivity effectively for the networking services of its offices for data exchange.

2. People and Resources

a. Project management & Monitoring – Full time team in place

Department's IT cell, called SSG (Smart Support Group), is constituted with IT interested and enthusiastic officers for the management, monitoring and implementation of the project. The team consists of a Nodal Officer and 4 subordinates. The following tasks are handling by the team for the successful implementation of the project.

- Examine and enable formalization of changes required in the departmental processes and Review the progress of implementation of BPR and Change management
- Conducting regular meetings for evaluating the progress of the implementation and updating the status to the Transport Secretary, Transport Commissioner and higher officials of Motor Vehicle Department
- To improve the Server response, better infrastructure is in plan.

- Manage tendering process for selection of Consultant/Implementation Agency(ies)/Content Service Provider/Data entry agency/ies and recommend for approval to apex committee
- Manage Communications and Training plan.
- Assess the progress of work on the project and advice the project execution team on new directions/approach and ensure its linkage with related work in the concerned departments
- Exercise strategic control including budget controls

b. Achievements of training of internal & external members on the new system

- Training is given to vehicle dealers and driving school people for using e-Applications.
- Officials from the department are identified and trained as master trainers for giving training to others on handling the e-Application processing. It is proposed to train a minimum of 2 officers per office for processing e-Applications.
- Training to the master trainers of support providers of the department (SPMVD) has been given by NIC and trained employees of the department.
- Training has given to staff of FRIENDS on the MVD.

c. Change management strategy defined and implemented

- Giving better working ambiance to the employees is one of the vision of project. Also the users are proud of working on latest ICT technologies and they are able to give better services to the citizen. Internal stake holders have recorded their appreciation
- By centralizing all the data available in the state data centre 24X7, information is made available through multi-channel service delivery access points like Touch Screen Kiosks, SMS, Service Counters, e-mail and Internet. This not only ensures transparency but also availability of the data to all its stakeholders.
- Acceptance of e-Application and processing achieved very good acceptance from the citizen, dealers, driving schools and employees of the department.
- Registrations of new vehicles are planed to accept through the online application submission of Vehicle Dealers and this could be

implemented successfully. More than 4 Lakhs online application are processed and all the vehicle dealers in Kerala state are the using this new system.

- Online submission of applications for Learners License and Driving License are warmly welcomed by the driving schools. Pre-booking of Learner's License Test date could avoid long waiting in the queue and capturing data from e-Applications directly for registration of applicants for learners license test could help the speedy process of the service.
- Information sharing between other Government departments on vehicles and driving license details are decided and implemented successfully. The facilities provided by this department is effectively using by departments like Police, Excise, Passport etc. and recruitment agencies like Public Service Commission, Employment Exchange etc.
- Enforcement departments like police, excise, and MVD inspectors are accessing the data through internet, kiosk, mobile devices etc. and they could immediately identify vehicles and drivers met with road accidents, details of offenders of motor vehicles laws, theft vehicles and vehicles used for criminal purposes etc.
- With the implementation of the ICT driven programs, the delays in processing the applications can be avoided to a great extent and the department could get a better image from the public.
- Acquired the accuracy in data which helps correctness and speed in generating reports for the queries from Government and Public.
- Payment integration between FRIENDS and other CSC's helped the citizen to remit their vehicle Tax, CESS, Fee etc from other near by places.
- The department will give the facility to the citizen to remit tax, fees etc. by means of e-payment immediately, on getting permission from the Government. The web site security auditing and other background process for implementing e-Payment is in progress. By the end of this financial year, department can provide e-Payment facility also to the citizen.
- After the implementation of e-payment facility, Department is planning to give some of the services like issue of DL particulars, RC particulars, text order for conductor license , Drivers Badge etc. over the net at the time of submitting the application and remitting the fees through e-payment facility. In such cases, the applicants need not come to the office.

d. Leadership support (Political, Bureaucratic) and its visibility

The department is under the Ministry of Transport, Government of Kerala. The Department is headed by the Transport Commissioner who is assisted by an Additional Commissioner and two Senior Deputy Commissioners at the Head Office. Presently, the Minister for Transport is Sri. Jose Thettayil and the department is headed by Sri. VP Joy, IAS, Secretary to Transport & Transport Commissioner and Sri. Alex Paul, Secretary STA & Senior Deputy Transport Commissioner. The leadership, valuable advice and suggestions given by these officials, for the utilization of the advanced technology of the IT, is tremendous. They are keen always to fulfill the vision and goals of the ICT initiatives of the department in the following area

- To review the financial and technical progress of the project
- To assess the progress of work on the project and to advice the project execution team (SSG) on new directions / approach and ensure its smoother progress
- To ensure advance action regarding completion of the project, establishment of facilities. Its utilization and transfer of know how etc. for successful replication.
- Internal inputs from employees and external inputs from other stake holders helped a lot to improve the system. The timely change requests based on these inputs made the system as an acceptable one.
- The state level needs are reviewed by the IT Secretary and other senior secretaries of Govt. of Kerala.

e. Financial Model (Funding pattern , Business model PPP etc) defined and implemented

- This is a Government-owned project implemented by Kerala Motor Vehicles Department and the technical support is provided by NIC
- Government gets benefit in terms of man power redeployment and enhancing the quality and quantity of services. Financial benefits occurred when services are charged either through PPP model or through govt. delivery channels like AKSHAYA centers
- This one of the good BOMT model of kerala Government
- Data Centre infrastructure is used for server collocation, security and data protection

- Kerala Motor Vehicles Department meets the miscellaneous funding requirements
- Fund given by Central Ministry of Road transport is effectively used for the FAST (Fully Automated State Transport)
- As the departments are using the already available network infrastructure and computers, this does not incur any extra cost on the department except for the scanners. Maintenance charges are too minimal. An initial capital to buy central servers was the only expenditure met by the department.

3. *Technology*

a. *Disaster Recovery & business continuity plan defined & implemented*

- Backup servers are available in the state data centre with postgresql slony replication features.
- The essential State Register Data is replicating to NIC data centre and from their to the National Register at NIC Delhi and Hyderabad data centers
- Daily DB backup and log backup are enabled
- As the new initiatives of the department have already obtained a very good public acceptance and employees support, the system will continue in the future also.

b. *Technological solution cost effective and maintenance over time*

- Open source solution on LAMP (Linux – Apache – Postgresql – PHP) implemented
- PHP web services are used for data synchronization and data transfer between other departments, National Register, FRIENDS etc.
- Tax calculation web service can be used by FRIENDS, ASKHAYA, and Banks etc for the collection exact tax of the vehicles.
- NIC meets the technology requirements
- Employees and SPMVD (Support Providers of MVD) are given training by NIC

c. *Security and confidentiality standards defined and implemented*

- All the security standards suggested by the security auditors (STQC) are incorporated. Security auditing is in progress

- Confidential data of department is sharing only to the department authorized users
- Security standards and firewalls available in the state data centre are also protecting the data and site from malicious attacks.

(V P Joy, IAS, Transport Commissioner, Motor Vehicles Department, Transport Commissionerate & M Asir Edwin, Technical Director, NIC, Thiruvananthapuram, email: asiredwin.m@nic.in)