

Evaluation of the eRL (e-Revenue License) System

Information & Communication Technology Agency of Sri Lanka

Table of Contents

1.0 Background	3
2.0 The expected outcome and outputs of eRL system.....	3
2.1 Expected Outcomes	3
2.2 Expected Outputs	3
3.0 Methodology	4
4.0 Summary of Findings with respect to Outcomes and Outputs of the Project	5
4.1 Outcomes:.....	5
4.2 Outputs:	7
5.0 Vehicle Population in Sri Lanka	9
5.1 Sri Lanka Population Growth Vs Vehicle Population Growth	10
6.0 Rationale for Improving Current eRL	10
7.0 Benefits of eRL System.....	11
8.0 The issues and problems.....	11
8.15 Issues, Problems and Lack of Features with online renewals	13
8.15.1 Payment related problems	13
8.15.2 Call centre related problems.....	14
8.15.3 Server problems.....	14
8.15.4 Browser issues	14
8.15.5 Programme Issues.....	14
8.15.6 Validation Issues	14
8.15.7 Postal address issue	14
8.15.8 Tax related matters.....	14
8.15.9 Reminder Facility	14
8.15.10 Restricted Access	14
8.15.11 Lack of System Integration.....	14
8.15.12 Restricted to Certain Categories	15
8.15.13 User-friendliness Issue	15
8.15.14 Temporary License.....	15
8.15.15 Delayed original license	15
8.15.16 Display Issue.....	15
9.0 Proposed Project Implementation Modality	15
10.0 Recommendations	16
10.1 Recommendation for short term	16
10.2 Recommendation for medium term	16

1.0 Background

There are ICT Agency of Sri Lanka (ICTA), as the main apex government agency responsible for digital transformation, initiated several e-Government projects to improve the efficiency and effectiveness of public services.

This report summarizes findings of the evaluation exercise carried out during past two months with respect to existing e Revenue License (eRL) system. The study also focused on identifying the requirements for the proposed new eRL system which will subsequently replace the existing one.

The eRL system was officially launched in 2009 initially covering western province y and subsequently it was expanded to other provinces too. Currently it covers every province and every divisional secretariat division. Before, implementation of eRL if someone wanted to renew a vehicle revenue license he/she had to visit only to the respective DS office, but with the introduction of eRL, the revenue licenses can be obtained/renewed through any PDMT office or DS office within the province in which the vehicle is registered. Even the provincial boundary does not apply for someone use online platform to renew his/her revenue license.

2.0 The expected outcome and outputs of eRL system

2.1 Expected Outcomes

- 1) Improved effectiveness and efficiency of delivering Vehicle Revenue License through electronic platform.
- 2) Improved perception of general public and other stakeholders toward public services.
- 3) Minimized requirement for submitting manual documents through integrating eRL service with other relevant service providers.
- 4) Reduced operational cost for PDMT.
- 5) Reduced time and cost for citizens for obtaining revenue licenses.

2.2 Expected Outputs

- 1) Integrated eRL system in order to improve the quality of services rendered to the citizens.
- 2) Online interface for citizens to renew their revenue licenses 24 X 7 from any part of the world.

eRL is one of the several eGovernment initiatives which has recorded tremendous success in terms of both outcomes and outputs. Overall, the stakeholders are satisfied with the way it helped them with their work and performance. However, due to increase in number of vehicles, availability of improved technology, limitation of capacity to cater growing needs of the citizens and that of Provincial Departments of Motor Traffic (PDMT) as well as to further improve the services provided to the citizens and to provide decision makers with relevant information for evidence-based decision making, it's become necessary to implement a new eRL system with all sophisticated features which shall help not only to satisfy the current needs but also the future requirements of PDMTs, legislators, government officials and citizens.

3.0 Methodology

A team consisting of M & E staff member of ICTA and M & E Consultants from the M&E firm carried out a rigorous interviews by using a semi structured questionnaire collect primary data, representing perspectives from various stakeholders ensuring inclusiveness and findings are more reliable, relevant and useful. Data were also gathered through reviewing, various secondary sources including statistical reports produced by PDMTs and DMT, statistics from eRL system gathered by ICTA, An online questionnaire was administered among the ones who obtained/renewed their revenue licenses online and received 378 responses. In addition, to ensure the completeness of the picture, researchers' observations in their visits to the selected organizations were also systematically recorded based on an observation guideline.

Data Collection Method

- Semi Structured Interviews
- Secondary Data
- Systematic Observations
- Informal discussions
- Online questionnaire

Interviews were conducted with senior management and staff of Department of Motor Traffic, senior management and staff of Western Province Department of Motor Traffic, senior management and staff of Southern Province Department of Motor Traffic and officers in-charge of North Western Province chief, some DS offices in WP (Kesbawa, Dehiwala and Maharagama), some DS offices in NWP (Polgahawela, Alawwa and Kurunagale). In addition, the citizens who visited the said offices were also interviewed to understand their level of satisfaction and of their experience in obtaining/renewal of revenue licenses from PDMTs and DS offices and issues that they faced in the process of obtaining vehicle revenue licenses. An online questionnaire was administered among the ones who obtained/renewed their revenue licenses online and received 378 responses.

In order to collect data the following organizations were purposely selected;

Sample Population

- Department of Motor Traffic (Sole authority to register all types of vehicles)
- Western Province Department of Motor Traffic (covers 35% of total number vehicle registered)
- Southern Province Department of Motor Traffic (covers 13% of total number vehicle registered)
- North Western Province Chief Secretary's Office (covers 14% of total number vehicle registered)
- 6 DS offices
- Customers renewed revenue licenses through PDMT and DS Offices
- Customers renewed revenue licenses online

4.0 Summary of Findings with respect to Outcomes and Outputs of the Project

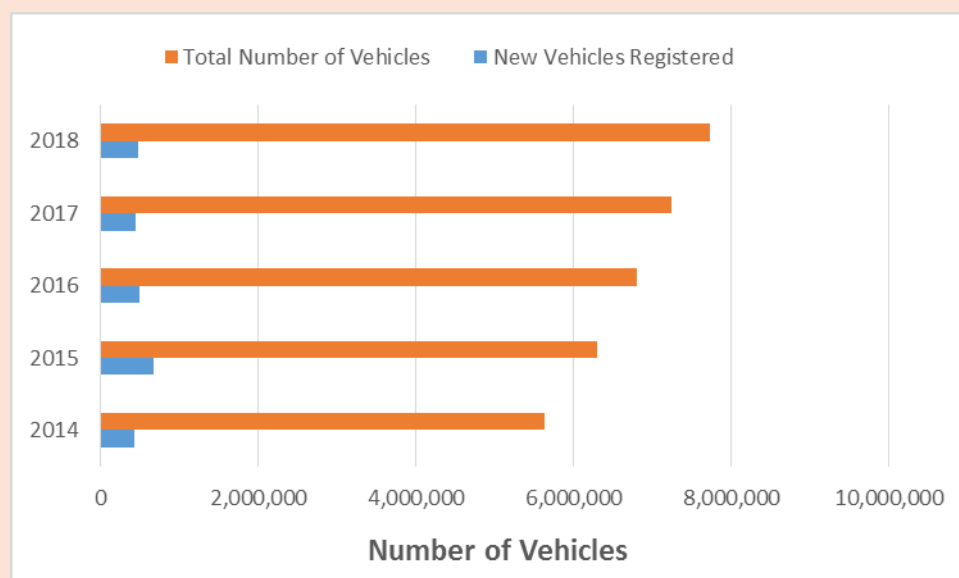
4.1 Outcomes:

1) Improved effectiveness and efficiency of delivering Vehicle Revenue Licenses through electronic platform.

Staff members of PDMTs and officers involved in issuing vehicle revenue licenses in DS offices have been provided with access to comprehensive eRL system to verify required information online and issue revenue licenses through eRL system. Undeniably eRL has enabled public officers to provide improved services to citizens.

Under the traditional method it took at least half a day to one day for a citizen to obtain/renew a revenue license. It required 5 to 10 minutes for an officer to review the application and prepare a revenue license. After implementation of eRL, citizens are able to obtain/renew revenue licenses within 10 to 15 minutes. It requires only 1 to 2 minutes to review documents and produce a revenue licenses.

Nearly 500,000 vehicles are added to the vehicle fleet every year. Therefore, a sophisticated electronic vehicle management system is essential.



In the citizen's point of view, eRL as well as other e-Government initiatives have significantly improved effectiveness and efficiency of government services. However, frequent time outs and still requiring to carry several manual documents etc. are to be addressed in order to optimize use of technology for improving effectiveness and efficiency of government services. Limited number of organizations integrated in the system, lack of real time update of information, issues in report generation, limited speed and connectivity issues of LGN- etc. diminish the usefulness of the current eRL system.

2) Improved perception of general public and other stakeholders toward public services.

Citizens greatly appreciate the e-Government initiatives implemented by ICTA. They believe that e-Government initiatives contribute to save time and money. They also believe e-Government initiatives help to minimize corruption, improve transparency and eliminate brokers and intermediaries. However, there is a general perception that government takes very long time to implement changes and once the changes are implemented they become obsolete quickly due to

delayed implementations. Therefore, quick implementation of planned activities is vital to reap expected benefits by new technologies. The legislative and procedural changes are also to be made in order to support and supplement e-Government initiatives.

3) **Minimized requirement for submitting manual documents through integrating eRL service with other relevant service providers.**

Currently, insurance firms and emission test firms are integrated with the system which help to check online the status of renewal of insurance and emission certificates without needing to look at hard copies of the documents. Notwithstanding, still public official demand for production original insurance and emission test certificates as precondition to issue and/or renew revenue licenses. They even maintain files for keeping the counterfoils of emission certificates. This in fact, doesn't support moving towards paperless offices. The reason for requesting manual document as stated by survey respondents:

- Insurance and emission records are not updated real time due to batch processing practices by partner organizations.
- Officers have been instructed to inspect above mentioned documents.

However, when using online platform, it doesn't ask for uploading of any such documents. The other issue with online renewals is that certain requirements are by passed as the system does not incorporate some salient information.

- Public sector field officers are required to obtain full insurance for their official motor bikes. It's being checked when renewing license at DS offices or PDMTs, but majority of field officers renew their licenses online by passing this requirement with the presence of 3rd party insurance only.

People can renew licenses online even if emission certificate is valid for one day. But, as per the rule, the emissions certificate shall be valid at least for six months.

4) **Reduced operational cost for PDMT.**

Cost of producing a revenue license and operational cost are reduced to a great extent. The incremental cost is almost ignorable compared to the revenue generated by PDMT. Every year number of licenses issued increase significantly, but the cost of operations of issuing licenses didn't increase proportionately.

Year	2016	2017	2018
No. of Revenue Licenses Issued	4,140,705	5,098,535	5,686,650

Only a marginal incremental cost has been recorded as stated by the senior officials of PDMTs. When citizens renew their revenue licenses online, it helps to minimize staff time and congestion in motor traffic departments and DS Offices. Indirectly, it also help to minimize pollution by eliminating the need for visiting license issuing offices.

5) Reduced time and cost for citizens for obtaining revenue licenses.

People do not need to wait in queues for long time due to improved effectiveness and efficiency in issuing revenue licenses. As per the earlier practice, people had to travel to the particular DS office under which the vehicle was registered originally. After implementation of eRL system, incidental cost and opportunity cost for citizens are minimized as people can obtain revenue licenses from any DS offices within the province. When citizens renew their revenue licenses online, it helps to minimize staff time and congestion in motor traffic departments and DS Offices. Indirectly, it also help to minimize pollution by eliminating the need for visiting license issuing offices. In order to understand the financial and economic benefits of the e RL system it is suggested to carry out an economic assessment.

4.2 Outputs:

1) Integrated eRL system enabling provision of high quality services to citizens.

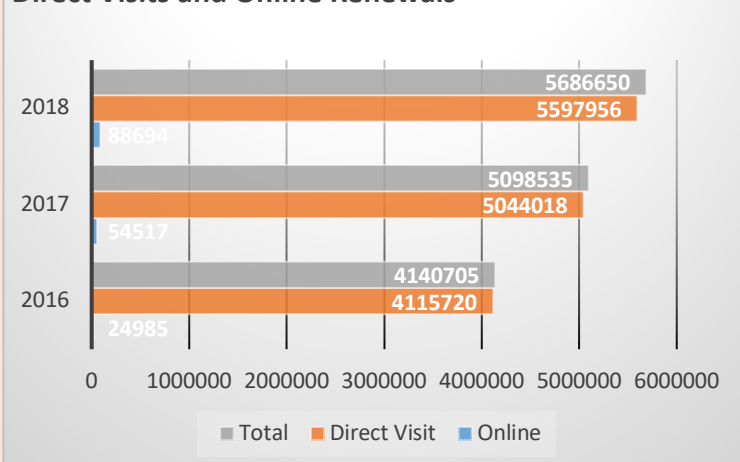
Staff members of PDMTs and officers involved in issuing vehicle revenue licenses in DS offices have been provided with access to comprehensive eRL system to check details online and issue revenue licenses. Undeniably eRL has enabled public officers to provide quality services to citizens. The process time (from 5 to 10 minutes to 1 to 2 minutes) and operational cost (incremental cost is almost ignorable compared to revenue generated) are reduced to a great extent. In addition, incidental cost and opportunity cost for citizens reduced due to improved effectiveness and efficiency in services rendered to the public. However, limited number of organizations integrated in the system, lack of real time update of information, issues in report generation, limited speed and connectivity issues of LGN- etc. diminish the usefulness of the current eRL system.

2) Online interface for citizens to renewal their revenue licenses 24 X 7 from any part of the world.

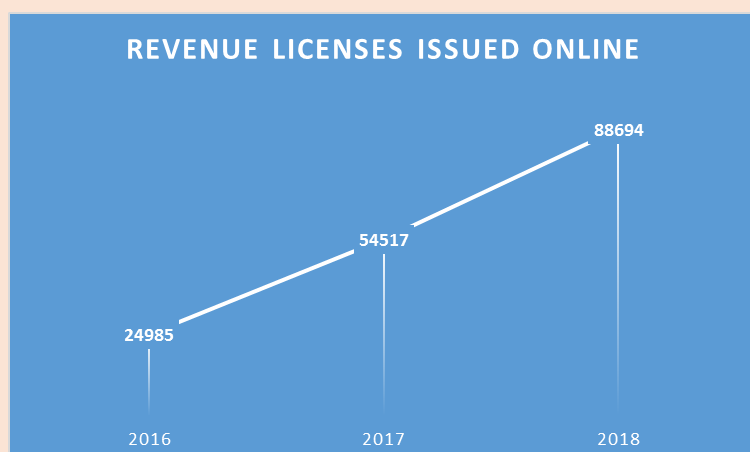
The vehicle owners can renew revenue licenses online 24 X 7 irrespective of time and location. Even people living overseas also can renew their vehicle revenue licenses online on timely basis which help avoid fines and issues caused by traffic police officers for non-renewal of revenue licenses on time.

The number of people who use online platform to renew revenue licenses are less compared to the number of people who visit DS offices and PDMT offices for renewing their revenue licenses.

Direct Visits and Online Renewals



However, the number has drastically increased in the recent past.

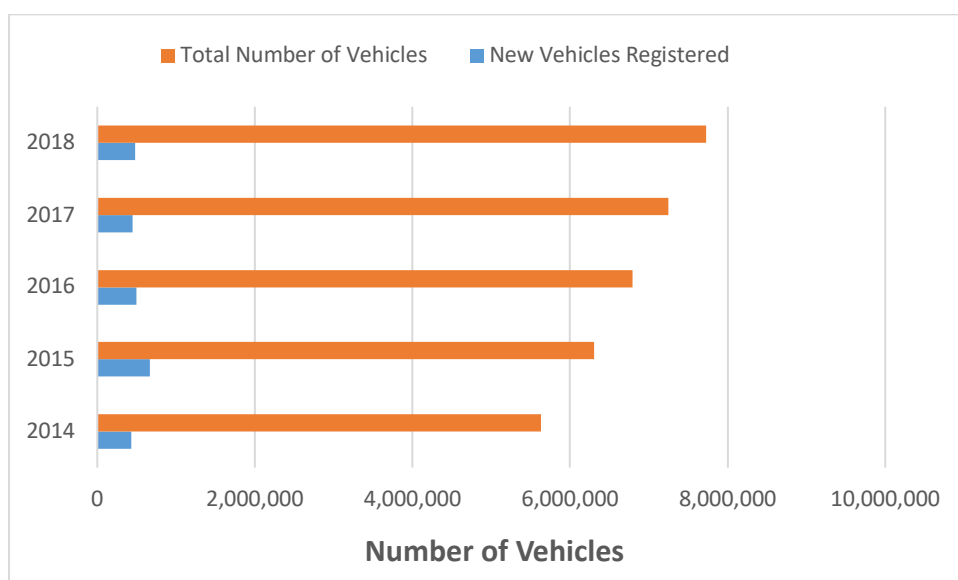
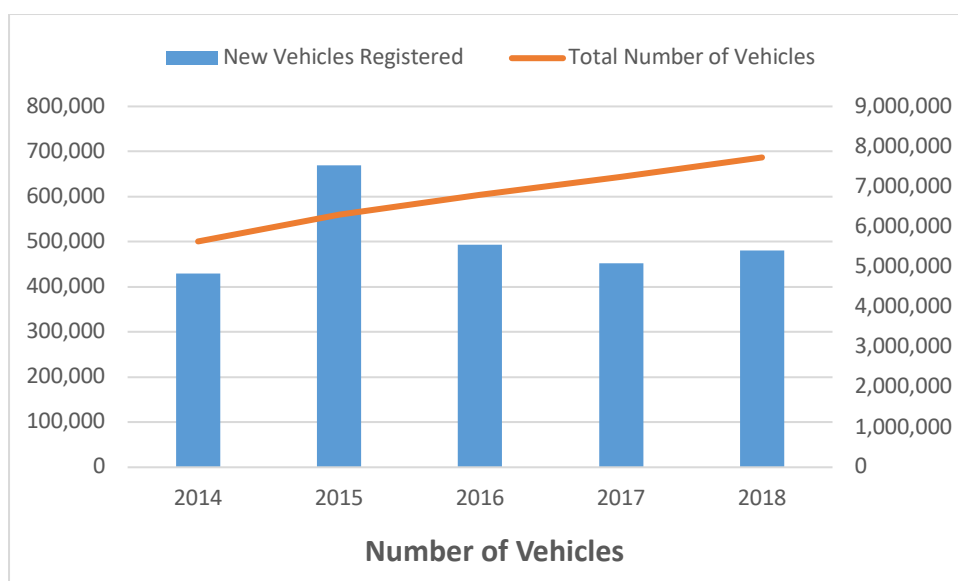


A user friendly sophisticated online platform is vital to cater the growing need for online solutions by citizens. The main reason for not using online platform by majority of people for renewal of revenue license is lack of awareness about the availability of such facility. Neither PDMTs nor DS offices have taken any constructive measures to educate people on availability of online renewal facility. Technical glitches with online renewal system, additional charges imposed credit card payments, change of address etc. being other reasons for not using online platform by citizens. In addition; some issues with payment gateway, browser issue, not being able to enter new postal address etc. cause issues with respect to using online eRL system.

5.0 Vehicle Population in Sri Lanka

Number of vehicles keep on increasing day by day. There is no any immediate solution for controlling traffic and air & sound pollutions in major cities. Every year, around 500,000 vehicles are added to the vehicle fleet.

Description	2014	2015	2016	2017	2018
New Vehicle Registered	429,556	668,907	493,328	451,653	480,799
Total Number of Vehicles	5,633,234	6,302,141	6,795,469	7,247,122	7,727,921

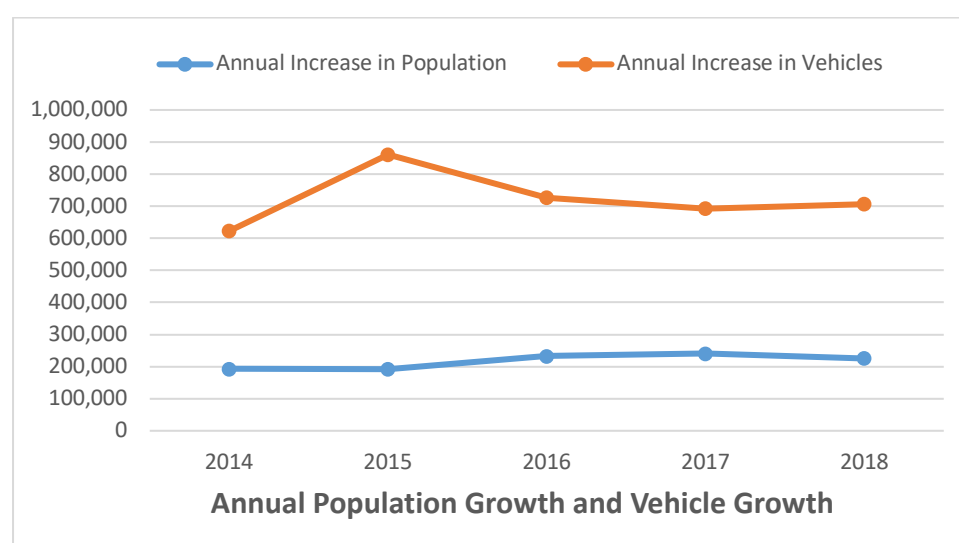


5.1 Sri Lanka Population Growth Vs Vehicle Population Growth

Sri Lanka population grows by 200,000 per year and vehicle population grows by 500,000 per year. Unless some measures are taken by Governments, the vehicle population and traffic congestion are becoming huge problems for the nation. Therefore, the government of Sri Lanka shall focus on improving public transportation system in the country in order to minimize vehicle imports, to provide convenient affordable transport solutions to people, to control air pollution, to minimize negative balance of payment and so on.

Annual Increase in Population and Vehicle

Description	2014	2015	2016	2017	2018	Average Growth
Annual Increase in Population	193,000	192,000	233,000	241,000	226,000	217,000
Annual Increase in Vehicles	429,556	668,907	493,328	451,653	480,799	504,849



6.0 Rationale for Improving Current eRL System

The current eRL is already overloaded and no more improvement is possible. Already employees are facing frequent time out and not able to generate required reports on timely basis. Number of vehicles registered every year drastically increases (500,000 per year) and the current vehicle population will double in 5 years as per the observation of industry. If no action taken to develop a new eRL system to cater current and future demands, the Provincial Departments of Motor Traffic (Provincial Government) will face immense challenges in issuing and renewing of vehicle revenue licenses.

The Department of Motor Traffic (Central Government) has already taken some initiatives to implement a comprehensive eMotoring Project under PPP modality. The private sector partner is responsible for developing and maintaining the system and the DMT will pay only a nominal fee less than Rs. 200 per transaction, only for major transactions-registration of new vehicles and transfer of ownership. After 5 years, the system will be handed over to DMT without any additional cost to the government. Maybe, same modality could be followed by ICTA for the proposed eRL V2.

7.0 Benefits of eRL System

Licenses are issued within a minute upon submission of documents by a customer, but under the traditional system it took 5 to 15 minutes. The maximum waiting time reduced to 15 minutes from half a day to one day. Only few manual documents are kept with licensing issuing office which also can be eliminated gradually. Cost of issuing a license has gone down. As stated by the Commissioner General of PDMT/WP, around 500,000 vehicles are added to the fleet every year, but cost of issuing licenses do not increase proportionately. eRL system helped to eliminate brokers and improve transparency in the process. Customers can obtain licenses from any DS office within the province. Online platform allows renewal of license irrespective of the location and time boundary. eRL system has minimized use of papers thereby contributed to minimize deforestation and improve quality of life.

8.0 The issues and problems

There are several issues and problems which undermine the benefits and use of eRL system. Such issues and problems are discussed below:

8.1 Capacity Issue

eRL System is being used beyond its capacity and therefore, it often encounter system time out, delay in processing etc. Report generation is extremely difficult after island wide expansion of eRL system and due to increased data load. If someone starts generating reports somewhere, the license issuing process come to halt island wide and people across the country have to wait for long time to obtain their revenue licenses. Issuing licenses during month starts is becoming a huge issue due to increased number of month end reports generation by various offices and ICTA.

8.2 Report Problems

Report generation often requires several hours and some offices required the staff to work overtime only for the purpose of generating reports. The report generation issues cause negative impact on performance of staff and it even affect day to day operations of offices and even cause issues on tallying of accounts and deposit of revenue collected by means of issuing revenue licenses. Help from ICTA on report generation is not adequate and often times relevant staff members of ICTA tend to ignore the requests made by PDMTs and DS offices. The recent adverse development is that the users of the eRL system are not able to generate reports even beyond usual business hours.

8.3 Integration Issue

Certain information such as emission tests, ownership transfers, insurance data etc. are not updated in the system real time. In several occasions, the responsible officers had to manually update such data which causes human errors, fraudulent transactions, delay in issuance of revenue license etc. The link between RMV and PDMT are sometime breaks which delay the process further as the relevant officers need to update required data manually by relying on the documents submitted by customers which exposes licensing issuing officials to unnecessary risks.

8.4 Province Restriction

The data between provinces are not integrated within the system. Therefore, when there are inter provincial vehicle transfers, such information shall be undated manually which again causes same issues as discussed above. Furthermore, inter provincial license issuance are made impossible which is again a major drawback in the system.

8.5 Inconsistency

Certain procedures are by passed when renewing licenses online. Public sector field officers are required to obtain full insurance for their motor bikes. It's being checked when renewing license at DS offices or PDMTs, but majority of field officers renew their licenses online by passing this requirement with the presence of 3rd party insurance only. People can renew licenses online even if emission certificate is valid for one day. But, as per the rule, the emissions certificate shall be valid at least for six months.

8.6 Leasing Facility Related Issues

Leasing firms and leasing facilities are not integrated with the system. Every time customers need to obtain certified copies from leasing firms and the same shall be filled by license issuing bodies. There are instances in which people made fraudulent rubber stamps of leasing firms and misled government officials. In addition, offices issuing licenses need to maintain a file for filing copies of certified vehicle registration books and sometime need to verify the information through telephone calls with respective leasing firms.

8.7 Temporary License Issue

If anyone who obtain revenue license online, he/she can print a temporary license and the original shall be posted by the relevant PDMT to the address available in the system. If a person changes the address without informing the DMT, there is a problem in delivering the revenue license to the concerned person. The traffic police however, insists on having original revenue license in all the vehicles. This issue to certain extent discourage people to use online renewal services. Customers cannot choose where the license shall be posted while renewing online, it often lead to sending of licenses to the address in which the vehicles were initially registered which creates unnecessary issues and delays to both the government and citizens.

8.8 Traffic Police Related Problems

To ensure achieving the full benefit of the e RL system, it would be great expand the system to integrate with the traffic police so that they will be able to directly check whether the particular vehicle has up-to-date revenue license and/or insurance policy. Under the present context, traffic police constables keep on insisting on carrying original license and insurance policy all the time. Further, the vehicle owners and drivers need to carry several documents which emasculates the use of electronic vehicle management system.

8.9 LGN Problem

Due to limited speed and connectivity issues of LGN, people use ADSL or dongles for accessing eRL system. It doesn't justify the significant amount of public money invested on developing and maintaining of LGN programme and infrastructure.

8.10 Manual Documents

Customers still need to produce some manual documents such as vehicle registration book, emission test certificate, insurance certificate, fitness certificate (for heavy vehicles) etc. to obtain revenue licenses. It doesn't eliminate the need for manual documents which is the aim of e-Government initiatives. The commissioners of PDMTs agreed that the requirement for manual documentation can be minimized and eventually eliminated if the system has real time integration with other relevant organizations such as insurance companies, emission testers etc.

8.11 Arrears Recovery

Furthermore, recovering of arrears is not included in the system, it also requires manual calculation of figure and including the same in the eRL system. This again leads to human errors and manipulation of information. When new vehicle categories are introduced, the officer issuing license has to enter the details manually and issue license which requires long time and other customers have to wait in the queue for long time.

8.12 Project Ownership

There is no ownership transfer of project and the support received from ICTA is not sufficient. ICTA also doesn't have cadres for deployment huge support service team. A centralized project support team shall be set up possibly under the supervision and leadership of PDMT/WP and the associated cost shall be proportionately shared among all PDMTs. In addition it would be worthwhile to explore the possibility of setting up a proper business model ensuring sustainability, further enhancement and recovery of ICTA investment and operational cost.

8.13 Control Issues

The supervisors can alter the information and approve by themselves which exposes several risks including fraud. The clear segregation of duties do not prevail. If an approving officer edits any information, then that shall be approved by another senior officer which is not prevalent in the current eRL system. In some places, even the supervisors' involvements are not required. The officers issuing licenses perform everything by themselves.

8.14 System Downtime

Several offices complained that 3 to 4 hours of system downtime occur 3 to 4 days a month. It not only curtails the effectiveness and efficiency of the system, but also cause necessary pressures and issues to officers and customers. It will lead to lack of trust on online systems.

8.15 Issues, Problems and Lack of Features with online renewals

8.15.1 Payment related problems

If the payment is done without getting the service even, the payments is not credited back to relevant account. Some visa cards do not support this service. People are annoyed with strange convenient fee in addition to the postal charge being imposed.

8.15.2 Call centre related problems

Sometime people don't receive any constructive support from 1919. There is no any direct line to contact with respect to issues related to eRL system.

8.15.3 Server problems

Poor server availability has been experienced by some people. When there is an error, people have to start from the beginning. It's better if the work completed can be saved.

8.15.4 Browser issues

System works well with firefox. People who uses chrome often experience problems.

8.15.5 Programme Issues

Sometime, the system is not available during nights and holidays which is a huge drawback. There are alignment issues with temporary licenses. Often, the programme does not capture insurance information appropriately. Some people tried several time, but couldn't succeed and finally went to issuing offices to renew their licenses. The database capacity is limited and which imposes limitations on system performance.

8.15.6 Validation Issues

According to the users, system requires several steps to validate insurance, emission tests etc. It is not good use of citizens' time. According to ICTA programme team, only single validation is sufficient. Need to verify and appropriately address if any issues found.

8.15.7 Postal address issue

The licenses are posted to the address in which the vehicle was originally registered. In practice, many people change their postal addresses for various reasons. People can simply be allowed to enter the address to which the revenue licenses shall be posted.

8.15.8 Tax related matters

Some taxes such as carbon tax are not included in the system which often lead to inconsistencies and requires customers to visit DS offices to pay carbon tax after renewing revenue license online.

8.15.9 Reminder Facility

The current eRL system does not send reminders via SMS and emails regarding expiry dates of revenue licenses, insurance, dispatch of original licenses etc. which can easily be facilitated through electronic systems with new technology with minimum cost as a value added service to citizens.

8.15.10 Restricted Access

Currently the system can be accessed by logging in to eRL online platform only and there is no any mobile applications for using eRL system.

8.15.11 Lack of System Integration

Not all the banks and insurance firms are integrated with the system. People can't renew their revenue licenses online if their insurance firm is not integrated with the system.

8.15.12 Restricted to Certain Categories

Some categories such as Heavy vehicles licenses cannot be renewed through eRL system as fitness certificate issuing firms are not integrated with the system which again limits the use of eRL system. The restriction even vary province to province, the three wheelers registered in UVA province cannot renew revenue license online.

8.15.13 User-friendliness Issue

eRL system in use is not user friendly and therefore, many people face difficulties in using the online platform. People with first time registered vehicle and newly transferred from other person cannot get licenses online.

8.15.14 Temporary License

The template in which temporary license is issued is not compatible with computer applications is generally in use (not in jpg or pdf format).

8.15.15 Delayed original license

Traffic police often deny to honor temporary licenses and most receiving of original license takes 10 to 20 days which causes issue to vehicle owners/drivers and discourage people to use online system.

8.15.16 Display Issue

The online system display western province on the top of the screen and the URL also consists of western province which mislead the users of the system. People spent time searching for eRL system with respect to their provinces. Also there are translation issues in Sinhala and Tamil which also mislead the users of the system.

9.0 Proposed Project Implementation Modality

A project steering committee represented by the Commissioner Generals of Provincial Department of Motor Traffic and CEO of ICTA shall oversee the project design and implementation. A new project team shall be designed or the existing project shall be modified under the leadership of ICTA with the participation of DMT and PDMTs. A special approval shall be obtained from relevant provincial authorities and Ministry of Finance to adopt PPP modality. A two stage RFP shall be advertised to select a qualified and experienced private sector partner to enter in to PPP agreement/contract with the Government.

The new eRL project shall use the vehicle database developed and maintained by the DMT and thereby, the vehicle details as well as all required integration which are done with the eMotroing system will automatically be made available to the proposed eRL system. eRL project may identify and incorporate additional integration as required. The private sector partners shall be compensated with an amount agreed in the PPP agreement on a monthly basis if PPP modality is adopted. A contract management team shall be appointed including PDMT, ICTA and representatives of private sector partner to look in to the day to day contract administration matter and to mitigate risks that may jeopardize project success.

10.0 Recommendations

Currently the eRL system is running with its full capacity level and it has led to slowing down the system performance. Due to the fully utilization of current MySQL database structure, the continuation of eRL system require additional database tune up process, additional Database backup process and so on. In order to address the issues faced by the users of the system and to enhance the performance and the usefulness of eRL system following recommendations are made.

10.1 Recommendation for short term

There are sweltering issues which shall be addressed in the existing eRL system immediately without waiting for the launch of new eRL system such as:

- Extreme difficulties with respect to generating daily, weekly, monthly and year end summary reports are major issues which create immense hardships in balancing accounts and generating statistics for management decision making. By adding new servers or by other means, reports generation issues shall be addressed.
- Currently the users have to write to ICTA for their support to generate various reports required by them and their management. Users also do not get required support from ICTA staff for timely generation of reports which create unnecessary issues and delays.
- Calculation of Carbon tax and any other tax that may be imposed time to time are not facilitated through eRL system. This causes many issues such as delays, wrong calculation of tax, inconsistency, customer dissatisfaction etc. Some quick modifications shall be done to the system so that carbon tax and any other relevant tax can automatically be calculated by the system and relevant entries made in the general ledgers.
- Additional surcharge for customers using online platforms may be removed in order to encourage the people to use online platforms to obtain government services. It's noteworthy that there are cost savings for government such as staff time, internet cost, energy serving etc. part of which may be passed on to the citizens.

10.2 Recommendation for medium term

In the medium term a new eRL system with all sophisticated features shall be developed and deployed for the use of government officials and citizens which shall incorporate the following recommendations but not limited to:

- A PPP modality or a 2 stage RFP may be adopted for development and maintenance of new eRL system.
- The requirement for manual documents shall be eliminated and a strong integration between all relevant institutions shall be established and real time updating of data shall be enabled.
- Mobile applications shall be developed for easy access of systems and Kiosks shall be installed in prominent locations enabling people to print their licenses by citizens themselves.
- Reminders shall be sent to mobile phones and emails so that people will be reminded to renew their revenue license sooner and avoid loss of government revenue and avoid fines etc. by citizens.

- Mobile applications shall be developed for police departments which shall be incorporated with the eRL system so that vehicle related information can be tracked online without requiring for manual documentations.
- Traffic fine system may be incorporated with the eRL system and the citizens may be enabled to pay traffic fines through online platform, through DS offices and Kiosks set in prominent locations, and police officials may not need to keep driving licenses of citizens with them.
- One electronic card may be introduced instead of various manual documents so that the cost and time can be minimized.
- A sophisticated reporting features shall be introduced without any impact on system performance.
- Dash boards shall be developed to give overview of progress, system down time etc. as well as relevant access shall be given to senior officials of PDMTs.
- A single office shall be responsible for dealing with issues on eRL system possibly by PDMT/WP under a cost sharing agreement.
- The issues with respect to online renewal of vehicle revenue licenses shall be addressed so that the user friendliness and usability of the system can be enhanced.
- Better internal control system and user roles shall be defined in the new system so that proper checks and balances are in place.

“Sooner the action taken, lesser the problem will be.”