# **mParivahan**

# A citizen-centric transport solution enriched with latest technologies



mParivahan Mobile App has become an integral part of the transport ecosystem in a very short duration and gained significant mindshare of the citizens, government and businesses alike. By virtue of its huge popularity and features like Virtual DL & RC, QR code-based verification etc., it has made it to the list of most downloaded government Apps.

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Parivahan is an effective citizen-centric transport solution, primarily a mobile-based App for citizens and transport operators, providing access to all the transport services related to driving license, vehicle registration, taxation, fitness and vehicle permit. The App is applicable across the country, covering all the driving license (DL) and registration certificate (RC) holders, and its key stakeholders are citizens and enforcement agencies.

The App comprises:

- A mobile-based platform with Virtual RC/ DL Certificate options in place of paper-based documents and Regional Transport Office/ Traffic Office cations etc., services
- A web-based platform for Analytics, Management Information System (MIS), Reports etc., requirements of various stakeholders

### **Technologies Used**

• Application Platform: PHP

• Web Server: Apache

• Framework: Laravel

• RDBMS: PostgreSQL

• Web Services: RESTFUL

• Operating System: Linux, Android,

iOS

## **Innovations Applied**

Enabling a foolproof mechanism, the QR code-based encryption of Virtual DL & RC has been done for offline verification. This ensures convenience to citizens as well as efficiency for enforcement agencies.

### **Benefits/Impact**

• Serving majority of the user base, as it

is available in Android (open source) as well as proprietary operating system such as iOS, which are the two most prevalent platforms for mobile phones

- Engineering a 180-degree shift in the earlier process that saves citizens from the hassle of carrying physical cards for verification/ documents/ inspection/ offence filing related purposes, as Virtual DLs/ RCs are now acceptable
- Easily locating the nearby RTOs through the RTO guide feature in the map
- Ensuring rule compliance through integration with eChallan that enables enforcement officers to facilitate the verification of information (limited)

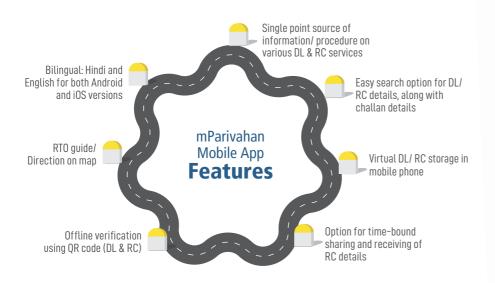


The mobile-based solution for various RC and DL services, in the form of mParivahan, has been remarkable in providing the power of anytime, anywhere access in the hands of citizens.

I appreciate NIC whose technological prowess and sustained efforts have enabled addition of another beautiful solution under the eTransport MMP umbrella. The huge popularity and acceptability of the citizen-centric Mobile App, with more than 1.31 crore downloads in a short span of time, is a testimony to that. I believe that with the continuous support from NIC, we shall continue to succeed in making the life of citizens, government and businesses easier.

#### PRIYANK BHARTI, IAS

Joint Secretary (MVL) Ministry of Road Transport and Highways





▲ mParivahan Mobile App

pertaining to owners of other vehicles during sale, purchase etc., activities

- Avoiding need for dedicated IT infrastructure, as it is integrated with other databases (eChallan, Vahan, Sarathi) for sharing/ receiving data through APIs
- Performing high on user friendliness quotient i.e., citizens need minimal guidance/ training on the usage of various features
- Working in integrated mode (API based) with eChallan enforcement solution, Vahan and Sarathi databases, enabling:
  - Rule compliance, as enforcement can fetch challan history, payment

details etc., for a citizen on real-time basis

- Use of minimal dedicated infrastructure for mParivahan
- Seamless, in-sync ecosystem
- Encrypting Virtual DL, RC details in the QR code for offline verification, which is a foolproof mechanism ensuring convenience to citizens and efficiency for enforcement agencies

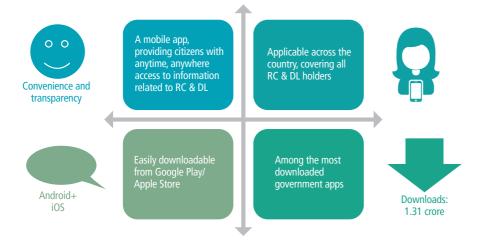
### **Key Statistics**

- Total App downloads: ~1.31 crore
- Total number of registrations:
  ~61 lakh
- Total number of Virtual DL/ RC: ~80 lakh

#### **Way Forward**

The mParivahan Mobile App is dynamic in nature, being enriched continuously with new features and functionalities that are empowered by the adoption of latest technologies and practices. Following points majorly capture the envisaged journey for mParivahan solution:

- Introduction of a feature for real-time offence and accident reporting by citizens
- Enhanced integration with all stakeholders like eCourts etc.
- Notifications on vehicle tow away
- Adoption of more digital payment options like mParivahan wallet etc.
- Multi-language support on the App
- Emergency services provisioning through the App
- Geofencing based services
- Road Accident Analytics for on the spot decision and forecasting based on a particular area, road condition, driving speed etc.



▲ Factual status as in November 2019

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