**E-Plate for vehicle registration details**

The project aims at designing a system which helps in displaying the vehicle registration details on LCD. This system makes use of RFID technology. Each vehicle is attached with a unique RFID tag. The system also has provision to enter the registration details like name, number etc.

The new e\_Plate project uses active (battery powered) RFID tags embedded in the plates to identify vehicles in real time. The result is the ability to reliably identify any vehicle, anywhere, whether stationary or mobile, and – most importantly – in all weather conditions. (Previous visually-based license plate identification techniques have been hampered by factors such as heavy rain, mist, fog, and even mud or dirt on the plates.)

**Chipped plates**

The plates are the same shape and size as conventional plates, and are permanently fitted to the vehicle in the same way. But each e-Plate contains an embedded tag with a unique, encrypted identification number that is transmitted by the tag for detection by RFID readers. The reader network, which includes fixed location readers (for use on the roadside) and portable readers (for use in surveillance vehicles and handheld devices), sends the unique identifier in real time to a central system where it is matched with the corresponding vehicle data such as registration number, owner details, make, previous cases and tax/insurance renewal dates.

**Identities secured**

A key benefit of the e-Plate is that the tag provides an encrypted and secure ID code which is registered of Transport’s vehicle database. This code prevents tampering, cloning, or other forms of fraud that can currently happen with rfid system systems.

**Surveillance applications**

The system is expected to be used to identify vehicles for applications such as security, access control, electronic payment dues , tracking and processing, traffic management, and customer service. Commercial applications could include car dealerships, rental companies, insurance companies, fleet operators, and parking garages. In the public sector, the main applications would include enforcement (compliance with road tax, insurance, and mechanical checks), access control to restricted areas, combating vehicle theft and associated crime, and traffic flow counting and modeling.

BLOCK DIAGRAM:

