

Vendeka provides System Integration and Operation and Maintenance for Electronic Toll Collection projects.

According to a study of traffic congestion on toll roads, heaviest congestion occurs near toll gates, where cars make a brief stop to pay the toll. Thus, the primary cause of traffic jams can be eliminated by creating a system that allows cars to drive through toll gates without stopping. This situation led to the commencement of the development of ETC. Electronic toll collection (ETC) aims to eliminate the delay on toll roads by collecting tolls electronically. ETC determines whether the cars passing are enrolled and electronically debits the accounts of registered car owners without requiring them to stop. The most revolutionary application of ETC is in congested cities, allowing to charge tolls without vehicles having to slow down. The system is available on roads with flat rates as well as on roads with rates calculated according to distance.

Vendeka provides System Integration and Operation and Maintenance for Electronic Toll Collection projects. Vendeka analyses the existing systems and delivers the most suitable ETC solution with the minimum CAPEX and OPEX requirements while keeping the highest performance level of the delivered solution. As we have the full scope of the equipment for tolling and our own System and Service Operations Center Software application, we can provide the best technology available in the market while maximising the revenues.

Our Key Capabilities are as follows:

- System Design and Architecture
- Software Development and Integration
- Database Design and Development
- Project Management
- End-to-End Implementation
- Communication Network Design and Implementation
- CCTV and Video Management
- Automated vehicle identification (AVI), and automated vehicle classification (AVC) products and real time transaction management
- Passive or Active RFID readers and tags
- VMS products and management
- Light-curtain laser profilers

## System and Service Operations Center

Vendeka's System and Service Operations Center application provides a smooth and easy operation both for staff and customers. It comprises following modules:

- System Monitoring and Trouble Ticketing
  - System Monitoring
  - Service Desk
  
- Backoffice Applications
  - Parameters, Tariff Plans and Lane/Plaza Definitions
  - Online transfer of Tariff Tables to Plazas
  - Online transfer of White and Black lists to Plazas
  - Rating (AVI based fare calculation)
  - Online transfer of the AVI based rated transaction to the Banks
  - Reporting (Statistical and Financial)
  - Commission
  
- Violation and Notification
- Web Based Customer Self Care
- Lane Applications
  - Generating Entry/Exit Data
  - Real-time transfer of the data to Plazas
  - Lane Control Functions (AVI, OCR, AVC, Tag reading, etc.)

