

Integrated Command and Control Centre and Smart Features

The key objective of this project is to establish a collaborative framework where input from different functional departments such as transport, water, fire, police, meteorology, e-governance, etc. can be assimilated and analysed on a single platform; consequently resulting in aggregated city level information. Further this aggregate city level information can be converted to actionable intelligence, which would be propagated to relevant stakeholders and citizens.

The Vadodara CCC Project includes establishment of **Integrated Command and Control Centre** that can operate both in normal situations (Day to day city management) as well as operation during Emergency Situation (Disaster Management). This project is being executed in parallel to other smart city projects, such as ERP, GIS, Public Wi-Fi, so that integration becomes speedy, giving this project higher success. Other **smart city projects (ERP, Public Wi-Fi, GIS, and Smart Mobility etc.) also has tight integration with CCC Project.**

Integration of feeds/data from of smart sensor/devices such as CCTV Cameras, ANPR System, ATCS Signals, Variable Messaging Sign Boards, Emergency Call Box, Public Address System, Environmental Sensors, GPS Tracking for fire department vehicles, etc. are also included under project scope. City Wide OFC (which is owned by VMC/VSCDL) shall enable connectivity between CCC and field devices/smart sensors.

Following are the ***impactful outcomes*** that can be achieved by this project:

- Better management of utilities and quantification of services
- Disaster Management and Emergency Response System
- Efficient traffic management
- Enhanced safety and security
- Asset Management

Smart Features across Vadodara City

Apart of **25-seater Command and Control Centre (CCC)** at Central location, the project also includes following citywide Smart Elements:

- Around 250 CCTV Cameras (Fixed and PTZ)
- Smart signals with Area Traffic Control System (ATCS) at 39 junctions
- ANPR Camera and ANPR Solution at 25 junctions
- Environmental Sensors at 8 locations
- Variable Message Display boards at 21 locations
- Public Address System at 13 junctions
- Emergency Call Box at 9 important locations
- Approx. 150 km of OFC Network (augmentation of 100km of 24 core fibre already laid by VMC)
- Integration of CCC with following existing projects:
 - a) Vadodara Eye (CCTV) Project
 - b) ERP Project
 - c) GIS Project
 - d) Water SCADA Project
 - e) Public Wi-Fi and iPoles (Smart Poles) project

The project has been awarded to a Consortium of **M/s nCode Solutions and M/s CMS Computers Ltd.** at a total cost of INR 88 Cr. The project cost includes supply of Hardware, Networking, Installation, and Commissioning of all above solutions as well as Operations & Maintenance (O&M) of all components for 5 years.

Command and Control Room at Badamadi Baug



A new Ground+3 building is being built at Badamadi Baug, Vadodara, for housing CCC and Administrative and Back-office Functions of VSCDL.

CCC Room

A 25- seater Command and Control Centre (CCC) Room is being setup in above CCC Building.



Other functional areas such as War Room/Conference Room, Tech Support Area, Call Centre/Help Desk Area, and CCC Management Rooms etc. will also be established in CCC Building. A Data Centre (Smart DC) is also being established at CCC building to accommodate ICT Computing Facility (Servers, Storage etc.).

Current Status

The CCC Building is 80% ready. The second floor work is being taken up on war-footing, to be completed by mid-September 2017. Till now, there is expenditure of around INR 1.66 Cr., for civil construction work.