

5. SMART SOLUTIONS – COIMBATORE

“Universal access to Best-In-Class Civic Services”

– Part of vision of Coimbatore as expressed in its Smart City Proposal (SCP)

CONTEXT

Coimbatore with a population of 1,051,721 (according to the 2011 census) and a decadal growth rate of around 20% is a rapidly growing city in Tamil Nadu. It is a hub of economic activity and is famous for its textile manufacturing also known as Manchester of South India. Coimbatore is undertaking numerous initiatives towards improving basic services and quality of life of citizens. Some of the initiatives are: (i) 24x7 water supply, advanced leak detection and smart metering; (ii) sewerage/ septage; (iii) 24x7 electricity and broadband access; (iv) public transport/ seamless mobility, ‘mass transit’, NMT and targeting ‘zero accident fatalities’; (v) extension of ‘Project Shunya’ (decentralized composting) in all zones including bio-methanation and composting facilities for local waste treatment, creating Waste-to-Energy plant; (vi) sustainable environment initiatives (vii) tagging sanitation assets to Property Tax database for traceability/ sustainable O&M; (viii) public safety and (ix) Transparent ICT-led governance/ citizen engagement.

However being a city of more than a million population the above initiatives are significantly challenging in scale and complexity to accomplish.

THE INTERVENTION

Project description

With the aim of effective implementation of the initiatives, Coimbatore has decided to adopt ICT/ technology based Smart Solutions for many of its initiatives. Towards this, an inventory of Smart Solutions and technology options was prepared keeping in mind the major interventions/ priorities for the city. These Smart Solutions and technology were then suitably assigned to the major interventions for the city.

The Smart Solutions include: (a) technology solutions for improvement of water supply, SWM, sanitation etc.; (b) Intelligent Transport System (ITS); (c) online ambient air quality monitoring; (d) energy efficient street lighting (e) GIS Mapping and Spatial Information Centre; (f) integrated CCTV surveillance; (g) web-enabled e-governance application; and (h) mobile-governance and citizen engagement platform.

Key outputs/ outcomes

The emerging benefits of Coimbatore's approach of adopted ICT/ technology based Smart Solutions shall be realized in the following areas:

- Water supply – SCADA, 'smart metering', advanced leak detection, online quality monitoring
- Solid Waste Management – RFID tracking of vehicles , Bio-methanation, Waste-to-energy, decentralized waste processing
- Traffic Management System – covering dynamic signal synchronisation, Automatic Number Plate Recognition (ANPR) cameras, license plate recognition camera, red light violation detection system and radar based speeding detectors built on the surveillance camera network
- Air quality – monitoring equipment at select locations to capture information on critical air quality parameters
- Street lighting – energy efficient LED street lighting in all roads and public locations
- Surveillance – surveillance network consisting of PTZ cameras, fixed box cameras, mobile transport cameras, at different locations, to capture high-resolution real-time images with facilities for wireless and wire connectivity download
- Scalable Data Centres, as part of Command and Control Centre, with an application portfolio covering Video Management System, Recording System, Analytics System, GIS and customized dashboards for Coimbatore City Municipal Corporation and various line departments including police/ Traffic Police
- Seamless IT connectivity built on wireless and fiber backbone to relay information from Smart Solution related equipment to Data centres
- Universal access to essential services for Citizen through web/ mobile platform

Impacts

In medium to long run, Smart Solution based approach is likely to improve governance/ administration/ monitoring of civic services thereby ensuring good quality service delivery/ convenience to citizens.

Support and mobilized resources

Project components are accessing funding from various sources including PPP, SCM fund and convergence from other schemes etc.



Smart Solutions –
Coimbatore