

## Mumbai Metro – The Metro Rail Service of Mumbai implements eFACiLiTY®



### CLIENT

Reliance Infrastructure has partnered with MMRDA in Mumbai to successfully implement a world-class transport system for the city of Mumbai, under the Government of Maharashtra, to set up the metro system from Versova to Ghatkopar in order to improve the traffic and transportation scenario in the East-West connectivity of Mumbai. The metro system is operated by the Mumbai Metro One Pvt Ltd (MMOPL). The metro line runs across 11.40 km connecting 12 stations from the East to West.

**Client:** Mumbai Metro One Pvt Ltd (MMOPL)

**Owner:** Mumbai Metropolitan Region Development Authority (MMRDA)

**Country:** India

**City:** Mumbai, Maharashtra

**Industry:** Metro/Transport

**Solution:** eFACiLiTY® - Maintenance Management System, eFACiLiTY® - Helpdesk & Knowledge System

**Implemented in:** March 2014

### BUSINESS SCENARIO

The introduction of the metro system by the Mumbai Metro One Pvt Ltd (MMOPL) provided effective connectivity between the eastern and western suburbs of Mumbai. The 12km line is fully elevated and consists of 12 stations from Versova to Ghatkopar.

### BUSINESS REQUIREMENT

1. Track and manage the assets/equipment of these 12 stations.
2. Automation of Maintenance activity, work order generation and SLA management.
3. Preventive & Corrective Maintenance.
4. Handle Job requests and ad-hoc situations.
5. Manage service requests.

## SIERRA's SOLUTION

The requirement was floated as a tender and Honeywell was given the opportunity to implement the Building Automation System along with the Enterprise Asset Management system to manage the preventive and breakdown maintenance needs of the metro rail network. Honeywell a leader in the Building Automation System / Building Management System significantly met the requirement of controlling and monitoring the mechanical, electrical and other equipment present across all 12 stations. For the complete automation and to meet the entire business requirement of the railway network; Honeywell required an Enterprise Asset Management (EAM) / Computerized Maintenance Management System (CMMS) that will also integrate with Honeywell EBI system.

SIERRA's innovative CAFM/CMMS/EAM product eFACiLiTY® - Enterprise Facility Management System was recognized by Honeywell as an apt solution owing to the numerous successful implementations that SIERRA has completed along with Honeywell across the globe. eFACiLiTY's Asset / Maintenance Management, Helpdesk and Knowledgebase system and Drawing & Document Management modules were selected for the project to meet the tender requirements in full.

## IMPLEMENTED SOLUTION

- The assets/equipment present across all 12 stations along with their preventive maintenance schedules were imported into the system
- The system was configured to trigger the preventive maintenance work orders automatically and assign to the technicians with a dashboard to monitor the status of the same
- The Honeywell EBI system was integrated with eFACiLiTY®
- The asset malfunction across the metro rail network is tracked by the Honeywell EBI and with the eFACiLiTY® integration the instant automatic work order generation was achieved successfully
- With the ability of SMS/Email alerts being triggered for every work order assignment to the technicians, the whole breakdown and preventive maintenance scheduling was automated
- Failure or delays to perform the technical work on-time is addressed by way of the Service Level Agreement (SLA) configurations that provide escalation alerts to their maintenance supervisors, managers etc.
- The high-priority break down maintenance jobs could be easily assigned to the nearest available technical in that area by eFACiLiTY®
- These resulted in excellent technical labour management and achieving high efficiency as the requirement to have dedicated maintenance staff at every individual station
- With the Helpdesk and Knowledge base module, the call center or the supervisor receiving any kind of reported complaints or problems can create call tickets and ensure that such calls are fully addressed and attended-to till it completely resolved
- The drawing & documents management module provided the facility to import and manage all drawings, floor plans, network diagrams, standard operating procedures etc. of the railway network so that the same could be tracked for decades to come, throughout the life cycle of the metro

eFACiLiTY® along with Honeywell EBI – centrally installed, provided complete accessibility of all 12 stations between Versova and Ghatkopar for reporting problems, tracking & managing assets and reviewing the status of job requests / work orders resulting in a completely automated, healthier, more productive and safer environment.